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IMPLEMENTATION OF THE URUGUAY ROUND AGREEMENT ON AGRICULTURE BY MAJOR DEVELOPED COUNTRIES

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1. Introduction

1. In the Uruguay Round (UR) negotiations of the GATT, agricultural issues played a prominent role, and at a number of junctions during the Round success or failure hinged on the possibility of finding a satisfactory solution to the many problems in agricultural trade. After long and hard negotiations, an Agreement on Agriculture (AoA) was reached, which became one of the cornerstones of the final accord. In the history of agricultural trade, this agreement is a notable innovation.

2. Before the UR, agricultural trade had largely escaped GATT discipline: in agriculture, many tariffs remained unbound; non-tariff barriers dominated and restricted trade; export subsidies were not only allowed but also not effectively constrained by the GATT; domestic subsidies and other forms of domestic support were large in most developed countries and were rarely challenged in the GATT.[1] The AoA has the potential of fundamentally changing that situation. All non-tariff barriers in agriculture in all participating countries are now being converted into bound tariffs, with very few exceptions. All previously unbound tariffs are now bound. Both new and old tariffs will be reduced, by 36 per cent on average, over the six-year implementation period (1995-2000). Agreed minimum access opportunities to markets are being created. There is now a prohibition of new export subsidies in agriculture. Existing export subsidies have to be reduced, by 21 per cent in quantity terms and by 36 per cent in terms of budgetary outlay. The overall level of trade-distorting domestic support is now bound, and has to be reduced by 20 per cent over the six-year implementation period. Commitments by developing countries are somewhat less demanding. An agreement has also been reached to continue the reform process beyond the current implementation period, and to initiate negotiations on further reductions in the year 1999.

3. With these new rules and commitments, the AoA has created a completely new framework for agriculture in the GATT/WTO. The policy significance of these changes for agriculture agreed in the UR can hardly be overestimated. In the historical perspective, the AoA is the most fundamental single change to the international trading regime in agriculture ever agreed. From a situation where disciplines on national agricultural policies, both at the border and domestically, effectively did not exist in the GATT, agriculture has now moved to a state where reasonably well-defined constraints to national policies have been agreed at the international level. This fact by itself is not only a remarkable departure from earlier GATT negotiations but it will also have, and has already begun to have, a noticeable impact on the domestic agricultural policy debate in many countries. Moreover, with the creation of new types of commitments defined in quantitative terms, a much improved basis for future international negotiations on further reductions has been laid. In other words, the AoA has fundamentally changed the rules of the game in world agricultural trade. There can be little doubt that these new rules will have significant implications for the outcome of the game, at least in the long run.

4. Less certain, however, is the immediate impact which the AoA may have on international markets for agricultural products in the years to come. To a large extent this impact will depend on the precise nature and quantitative extent of the policy changes adopted, as a consequence of the AoA, by some of the big players. Though the fundamental nature of the new rules for agriculture adopted in the GATT may hold much promise in the longer run, the practical implementation of the Agreement may not change the market situation very much in the immediate future. Hence, it is worthwhile to take a look at some of the implementation issues related to the AoA. This is what this paper is about.

5. With the seemingly simple and clear-cut rules and reduction commitments agreed under the AoA, it may be asked why its implementation is so much of an issue. In this context, it is useful to take a somewhat closer look at the structure of the arrangements agreed. Basically, the arrangements for agriculture come in two forms. First, there is the text of the Agreement on Agriculture, which specifies the rules to be honoured by all participants. Secondly, there are the country and commodity-specific commitments laid down in the country

schedules, as submitted to the World Trade Organization (WTO), which form an integral part of the accord reached. Jointly with the text of the AoA, these schedule commitments define and/or constrain the policies to be adopted by each participating country.

6. The process of establishing the country-specific Schedule commitments was governed by agreements laid down in a separate document, titled "Modalities for the Establishment of Specific Binding Commitments Under the Reform Programme",[2] in the following referred to as Modalities. This document defined what countries were expected to put in their Schedules, in terms of tariff bindings, access commitments, export-subsidy commitments and commitments regarding domestic support. A particularly important aspect of the Modalities was to provide a basis for defining the starting point from which reductions had to be made.

7. However, the actual determination of the country and commodity-specific base period figures, and on that basis the determination of commitments for future years was, within that framework, then left to the countries concerned. During what was called the verification process (between December 1993 and shortly before the Marrakesh Ministerial Meeting in April 1994), countries had the opportunity to scrutinize each others' proposed Schedules ("final offers"), and in something of a request-and-offer procedure they could negotiate adjustments.[3] When the deadline of this process was reached and the Final Act was signed at Marrakesh, the Schedule commitments thus agreed became legally binding. At the same time, the Modalities lost any legally binding power.[4] Hence, what countries have to do in the future now depends entirely on the content of their Schedules and on the relevant interpretation of these commitments according to the text of the AoA.

8. As a result of this process, the exact nature of the commitments accepted in agriculture can vary from country to country and from product to product. In theory, all starting points and reduction commitments should have been defined in the same manner (in accordance with the Modalities). However, in practice there can be, and there are, significant differences. Thus, one needs to look at each individual country's Schedule to determine the precise nature of the commitments that that country has accepted. For example, according to the Modalities, country X might have been expected to establish a base tariff for commodity Y of, say, £ 100 per tonne, and to reduce that tariff over the implementation period by at least 15 per cent to £ 85 per tonne in the year 2000. However, if that country had entered into its proposed Schedule a base tariff of £ 150 per tonne, to be reduced to £ 140 per tonne, and if that "offer" went unchallenged during the verification process and therefore became part of the actual Schedule of country X, it is that tariff commitment to be honoured during the implementation period.

9. Hence, one important aspect of studying the implementation of the agricultural agreements reached in the Uruguay Round is to analyse the way in which the fundamental agreement to bind and reduce levels of protection and support has been implemented through the specific commitments laid down in the country Schedules. This should be done with a view to how they differ among countries and products, and how they relate to the market and policy situation prevailing before the implementation period of the UR. This will be done in the first part of this paper, where Section 2 will discuss some aspects related to the nature and extent of the commitments accepted in the Schedules.

10. A separate set of implementation issues will become relevant when the commitments accepted are transformed into actual policies during the implementation period. In most cases, the AoA and the Schedule commitments do not directly prescribe measures to be adopted by governments. They either define constraints as to how far policies can go, or they limit the effects that policies are allowed to have. As a matter of fact, many commitments accepted are such that they may not require any policy change at all, at least not during the current implementation period. In addition, there is a number of seemingly more technical implementation issues which, nevertheless, can have important implications for actual trading activities. The allocation of quota licences under the many new tariff rate quotas that have resulted from the AoA is a case

in point. In this situation, it is clear that the actual effect the AoA may have on markets and trade will depend on the way in which implementation of the commitments accepted will proceed in the years to come. A look at some of the issues that are relevant in this context forms the second part of the paper. In particular, the extent to which commitments may require changes of existing policies is discussed in Section 3, and a number of concrete implementation issues is dealt with in Section 4. Section 5, finally, provides a short summary of findings and draws some conclusions.

11. Given the limited time available for doing this study, its scope had to be defined narrowly. As far as commitments accepted by individual countries are concerned, only three major participants of the AoA among the developed countries are covered - the European Union (EU), Japan and the United States.[5] In many cases, only a small number of products are included in the study, for illustration rather than for comprehensive analysis. An overall description of the AoA and a discussion of its merits and limitations are not provided in this paper.[6] The companion Agreement on the Application of Sanitary and Phytosanitary Measures and its relationships with the AoA are not discussed.

2. The Nature and Extent of Schedule Commitments

2.1 Significance of the Base Period

12. Quantitative reduction commitments can only be specified where a starting point is defined. For commitments that already existed in the past, that starting point naturally was the situation immediately before the start of the UR, i.e. 1 September 1986. The only cases of such pre-existing commitments, however, were tariffs already bound before the UR. In agriculture, the number of such bound tariffs, however, was limited, and significantly less than for industrial products (see table 2.1.1).

13. Moreover, in some cases non-tariff barriers were used to protect domestic markets even though tariffs had been bound, and general GATT exemptions (such as Article XI:2(c)) or country-specific derogations and waivers were used as a legal basis for such practice, or grey-area measures were used. Thus, the modalities specified that tariff bindings as of 1 September 1986 were the starting point only where products were indeed currently subject to ordinary customs duties. In these cases, the base rate of duty was the level of the bound tariff, even where the tariff actually applied was below that level. Thus, in a number of cases, the base tariff from which reductions have to be made is above the tariff actually applied before the beginning of the implementation period (see table 2.1.2).

14. However, except for such cases of previously bound tariffs, no commitments existed in the past that were equivalent to those agreed in the UR. Hence, a starting point had to be chosen from which reductions of protection and support were supposed to be made. As this starting point, actual levels of protection and support existing in a base period around the beginning of the UR were agreed. The base period chosen was 1986 to 1988 for tariffication of non-tariff border measures and for domestic support, and 1986 to 1990 in the case of export subsidies.

15. For tariffication, this base period was a "generous" choice in the sense that world-market prices for a number of important agricultural products were low compared to longer-run averages and relative to more recent prices (see graph 2.1.1). Because the exchange rate of the US dollar had come down significantly from levels prevailing before the base period, 1986-1988 world-market prices were particularly low if expressed in European currency units (ECU) and yen (see graphs 2.1.2 and 2.1.3).

16. As far as the volume of subsidized exports is concerned, the base period also was "generous" in the sense that there had been a tendency for subsidized exports to grow over time, such that the 1986-1990 average quantity of subsidized exports was higher than in previous periods. On the other hand, quantities of subsidized exports continued to expand during the UR negotiations, and the levels

reached immediately before the start of the implementation period (i.e. in 1993 or 1994) were often higher than those in the 1986-1990 base period (see graphs 2.1.4 to 2.1.5). Even though the possibility was provided, under defined conditions, to start reductions from the higher 1991-1992 levels, export subsidization at the end of the implementation period (i.e. in the year 2000) still has to be cut back by the agreed percentage (21 per cent for quantities, 36 per cent for outlays) relative to the 1986-1990 base period. In that sense the base period chosen for export subsidization was not too "generous" in many cases.

17. In the case of domestic support commitments, it is difficult to analyse the significance of the base period chosen, as estimates of the aggregate measurement of support (AMS) do not exist, and are difficult to construct, for periods outside the base period (for which countries had to provide their own calculations in supporting tables as part of their Schedules). However, trends of support levels over time are indicated by producer subsidy equivalents (PSEs) provided by OECD, a measure which is a distant relative of the AMS.[7] As shown in Graph 2.1.6,[8] for the countries covered here, total PSEs during the AoA base period (1986-1988) tended to be higher than before, but, with the exception of the USA not necessarily much higher than after the AoA base period. In that sense, the base period chosen for domestic support commitments can be said to be a reasonable representation of overall support levels at the start of the implementation period. However, as is discussed in Section 3.3 despite the way the AMS was defined regarding the accountability of some specific policies, which changed after the base period, it still turned out that the base period chosen for domestic support was also "generous".

2.2 Tariffication and Tariff Reductions

18. As the calculation of tariff equivalents for existing non-tariff barriers was (and probably had to be) left to the countries concerned, it cannot come as a surprise that countries had a tendency to use data that allowed them to bind tariffs as high as possible. The result was what is known as "dirty tariffication", where tariffs bound contain "dirt" in the sense that they are higher than what would have been exact equivalents of the non-tariff barriers existing in the base period.[9] It is not straightforward to estimate the amount of dirt that is included in individual tariffs, and no attempt has been made in this study to make such an estimate. Instead, results of a recent estimate by Hathaway and Ingco (1995) are presented in table 2.2.1. According to their estimate, some EU tariffs, and the US tariff on sugar, contain much dirt, while Japan could have bound higher tariffs, in the cases of wheat and coarse grains, by several hundred per cent. In theory, any dirt in calculated tariff equivalents should have been noticed by trading partners during the verification process, and eliminated as a result of that process, but not much has actually happened.[10] Many of the new tariffs that have resulted are very high, *ad valorem* equivalents often being several hundred per cent (see table 2.2.1).

19. In some cases, tariffication did not follow the ordinary rules laid out in the Modalities, but occurred in a different context. Yet, once the result had entered into the Schedules it became legally binding, irrespective of how it had arrived at. The outstanding example is the new regime for bananas in the EU. As it happened, the UR negotiations coincided with the creation of the Single Market in the EU. In the process of eliminating residual trade barriers among EU member States, the highly varying banana trading regimes, which the individual member states had maintained in the past, had to be harmonized. The EU felt the need to establish a new banana regime that would continue, now at the level of the overall EU market, to provide protection to EU banana producers and preferential access to ACP countries. At the same time, the EU had to include bananas in the process of tariffication. The result of these two simultaneous processes was a trade regime that essentially combines: (i) preferential quotas for ACP producers; (ii) a restrictive tariff rate quota for non-preferred banana exporters; (iii) a prohibitively high tariff on above-quota imports; and (iv) complex mechanisms for allocating licences to trading companies under the different quotas. In terms of AoA provisions, elements (i) and (ii) come under "current access" (i.e. maintaining market-access opportunities that existed

before the UR) and element (iii) comes under tariffication. In establishing the above quota tariff, the EU calculated a tariff equivalent for the base period, using the price of German imports from the Canary Islands as the internal price and the price of imports into Portugal as the external price. However, given the complex market situation in the past, it is not obvious that this approach has resulted in a tariff that is in any way comparable to the results of tariffication for other products. The regime is still under debate, both between the EU and Latin American banana exporters and domestically in the EU. It can well be argued that this regime results in pronounced trade distortions and economic inefficiency, even more so than tariff rate quotas generally tend to do.[11]

20. As far as reduction rates for tariffs were concerned, during the implementation period, countries were expected to reduce the level of tariffs, including those resulting from tariffication, by a simple unweighted average rate of 36 per cent, with a minimum rate of reduction of 15 per cent for each tariff line. This provision opened up the possibility of spreading the reduction requirement unevenly across products. For example, it was possible for a country to reduce tariffs on three items with an initial tariff of more than 100 per cent by only 15 per cent each, and still meet the overall 36 per cent unweighted average reduction by eliminating (i.e. reducing by 100 per cent) the 4 per cent initial tariff of one other product. As a result, countries were enabled to continue providing particularly high protection to their "sensitive" products. Nothing needed to be done to make rates of protection more equal across commodities. It has often been observed that distortions in agricultural trade are caused not only by high levels of overall protection in some countries, but also by unbalanced profiles of protection across commodities in individual countries.[12] For example, if a country has a high level of protection for sugar but less protection for cereals, then domestic crop production can be strongly biased towards sugar. Moreover, domestic use of sugar will be discouraged, and there will be a tendency to use sugar substitutes produced from cereals such as high-fructose corn syrup. As a consequence, market access for sugar is severely restricted. The resulting trade distortions can be very pronounced indeed, and more severe than those of a slightly higher but more balanced overall level of protection. In that sense, it is not impossible that the particular approach to tariff reduction adopted in the AoA can, in some cases, lead to even more, rather than less distortions in trade flows.[13]

21. In order to throw light on the question of how countries have used this flexibility to allocate tariff reductions to products, the agricultural tariff parts of the Schedules for the countries covered here have been examined in detail.[14] For better comparison, all specific tariffs were converted into *ad valorem* equivalents.[15] To get a first impression of how countries have allocated the required average rate of tariff reduction to individual products, base tariffs were plotted against reduction rates as found in the Schedules (see graphs 2.2.1 to 2.2.3.[16] As can be seen, the three countries included here have exhibited a not unexpected tendency to reduce low tariffs more than high tariffs. Also, there was a concentration of reduction rates on a number of standard rates. For example, the EU has reduced many low tariffs by 100 per cent, most tariffs by the required average rate of 36 per cent, and tariffs on a number of "sensitive" products by 20 per cent.[17] Somewhat surprising, it turns out that some tariffs will not be reduced at all, in spite of the Modalities provision that all tariffs should be reduced by at least 15 per cent. However, in most of these cases the base tariffs concerned are already the reduced tariffs, which otherwise would have had to be implemented only at the end of the implementation period.

22. Some other quantitative results of the analysis are presented in table 2.2.2. The unweighted average of reduction rates across all tariff lines was calculated from the Schedule contents, to determine whether the target of 36 per cent average reduction was met (row 1c). This was indeed almost exactly the case in all three countries. Also, the unweighted average of the *ad valorem* (equivalent) base tariffs was calculated across all tariff lines for each country (row 1a).[18] The result is interesting, though not unexpected. Japan has the highest average base tariff level with 52 per cent, the EU follows with half that

level, then the United States with 11 per cent. If the same calculation is done for the bound rates of tariffs at the end of the implementation period,[19] it turns out that average tariff levels are reduced significantly less than the 36 per cent average of reduction rates for individual tariffs (row 1d). In the case of the EU, the reduction of the tariff average is only 32 per cent, for the USA it is only 30 per cent, for Japan only 23 per cent. Of course, had each individual tariff line been reduced by 36 per cent, then the average tariff level would also have fallen by 36 per cent. Hence, the difference between the actual reduction of the tariff average and the target figure of 36 per cent is an indication of the extent to which tariff reductions are skewed, leaving higher tariffs less reduced than lower ones. According to the calculations presented here, the tendency to spare high tariff products was least pronounced in the EU and most pronounced in Japan. No more than the required 15 per cent minimum rate of tariff reduction was in Japan, for example, used for products such as ground nuts (with an initial tariff equivalent of 708 per cent), kiney beans (605 per cent), butter (418 per cent), and skim-milk powder (400 per cent).

23. A similar story can be told if one looks at the coefficient of variation[20] across tariff rates (also given in table 2.2.2). For base tariffs it differs significantly among the countries covered, displaying the different degree to which countries target protection to their "sensitive" products. The coefficient of tariff-rate variation is highest in Japan and lowest in the EU. At the end of the implementation period, tariff dispersion as measured by the coefficient of variation will have widened in all three countries covered. As suggested by the change in average tariffs, it widens most in Japan and only marginally in the EU.

24. If a more effective reduction of tariff dispersion and hence trade distortions among products had been desired, a reduction formula could have been chosen such that tariffs are reduced more, the higher they are in the base period, resulting in tariff harmonization. An example is the so-called Swiss Formula adopted for industrial tariff reductions in the Tokyo Round. If that formula had been used for agricultural tariffs in the UR, with an average of reduction rates identical to the one actually reached in each country, the results would have been as shown in the lower half of table 2.2.2. Averages of tariff rates would have declined much more than now achieved in the UR, by rates roughly twice as much as the ones now included in the Schedules (compare rows 1d and 2d). Also, coefficients of variation of tariff rates across products would have declined significantly (compare rows 1f and 2f). With such tariff harmonization, market access would have improved more for those products where it was severly restricted in the past. For example, access to sugar markets in the EU and the USA would have improved significantly had the rather high levels of tariffs on sugar imports into these countries been brought down more, such that they are better in line with rates of protection for cereals in these countries.

25. An issue related to tariff dispersion, though of a much more specific nature, is tariff escalation along given processing chains. Depending on the share of value added through processing in a given product, even slight increases in tariff rates along the processing chain can afford very significant protection to the processing activity involved.[21] Exporting countries then find it difficult to access the market for the processed product concerned, and may have to export the unprocessed raw material, even though their domestic processing industries could be potentially competitive. This is a particular problem for developing countries in their efforts to diversify their traditional commodity exports into higher value-added products.

26. Tariff dispersion, as analysed in the previous section, may or may not imply tariff escalation, depending on the particular commodity structure of tariff rates involved. However, it is a fact that trade policies of many countries exhibit tariff escalation, for both manufactures and agricultural/food products. If a formula approach had been applied to agricultural tariff reductions in the UR, such that high tariffs are reduced more than low tariffs, there would have been a tendency for tariff escalation to decline. However, as countries were left free to decide how they wanted to allocate the agreed

unweighted average reduction to individual products, it was possible to increase tariff escalation during the process of overall tariff reduction. As shown in table 2.2.3 this has indeed happened in a number of cases.[22] For example, tariff escalation has increased for coffee processing in the EU, for processing of some cocoa products in the EU and Japan, and for processing of manioc products in the US. For the products and processing stages included in that table, the cases of increasing and decreasing tariff escalation are equal in number. Increasing tariff escalation occurs most frequently in the EU and least frequently in the USA.

2.3 Tariff Rate Quotas

27. A notable result of the AoA is the establishment of a large number of new tariff rate quotas (TRQs), resulting from both the new minimum-access commitments (set relative to domestic consumption levels) for products undergoing tariffication, and from the agreement to safeguard specific (usually bilateral or plurilateral) access arrangements existing before the UR against potentially negative implications of tariffication ("current access"). Moreover, in the few cases where countries avoided tariffication altogether, for the time being, they had to accept somewhat larger and faster-growing minimum access commitments. Rice in Japan is the outstanding case in that category.[23]

28. For products undergoing tariffication in the UR, the Modalities specified, in some detail, where and how countries were expected to establish minimum-access commitments. Yet, the way countries have dealt with that provision in their Schedules is variable. The access quantities concerned were agreed to be set in a given relation (3 per cent, growing to 5 per cent) to domestic consumption of the product concerned during the base period (1986-1988). In implementing that provision, some flexibility was unavoidable for technical reasons, as trade statistics are not always easily reconciled with domestic consumption statistics, not the least because the nature of product disaggregation tends to differ. In some cases, countries have exerted such "flexibility" in a rather discretionary fashion. Two notable cases are dairy products in the USA and meat in the EU.

29. When calculating their minimum access commitments for dairy products, the USA has argued that the proper approach to dealing with the highly diversified product structure in that sector was to go back to fat and non-fat equivalents, to calculate the overall access commitment on that basis, and then to allocate it to individual dairy products.[24] The result, it has been said, was a set of commitments below those that would have resulted from direct calculation at the individual processed product level. Canadian negotiators who had spotted this fact, rather than pressing the USA into adopting a different approach, used that precedent for also scaling down their access commitments for some dairy products.

30. The EU, when establishing its minimum-access commitments in the meat sector, started on the basis of all meats added up into one aggregate. The resulting overall quantity was then allocated to individual types of meat, with essentially no relation to what the share of them was in total EU meat consumption. This approach allowed the EU to come up with minimum-access commitments for pork and poultry meat which were quite a bit below those that would have resulted from applying the minimum access ratio directly to EU consumption of those meats (see graph 2.3.1).

31. Another set of complications in assessing minimum-access commitments is the relationship between minimum and current access. Both types of access commitments come in the form of TRQs. In most countries' Schedules, no differentiation is made between the two types of commitments, as all TRQs are lumped together in the same part of the Schedule.[25] Hence, it is not always possible to identify the origin of a given TRQ. In theory, all minimum-access commitments should have been made, according to the Modalities, on a most-favoured nation (MFN) basis. Hence, wherever a TRQ is specified to be available only to given countries of origin, the source of that TRQ should be current access (resulting from previous specific trade arrangements with the named exporting countries). However, during the negotiations, a number of bilateral deals were struck according to which given minimum-access TRQs will be made

available (primarily) to agreed exporting countries. In most cases, these bilateral deals were struck silently. They are not visible in the Schedules, and may not be known to parties other than the ones directly involved. On the other hand, there are cases where existing bilateral trade arrangements are used to cover minimum access commitments. For example, the EU has declared in its Schedule that it may want to count preferential imports from countries in Central Europe under its existing "Europe Agreements" under the minimum-access TRQs (see table 2.3.1). Under this arrangement, most, if not all of, EU imports under minimum-access TRQs for poultry meat and some types of pork meat may come in under preferential quotas in the framework of the Europe Agreements, which in these cases are larger than the minimum-access TRQs. On the other hand, in the case of some other products (some egg products and pork meats) the EU has reserved the right to count preferential imports under the Europe Agreements against its minimum-access commitments, even though no preferences for these products have so far been granted to the countries in Central Europe. In other cases, imports under existing preferential arrangements or specific bilateral agreements allowed countries to avoid establishing new minimum-access commitments. Cases in point are sugar imports into the EU and the USA and beef imports into the USA.

32. One important parameter in the provisions for minimum access was not at all specified in the Modalities--the extent to which within-quota tariffs should be reduced below "normal" tariffs for above-quota imports. The only thing the Modalities had to say about the level of within-quota tariffs was that they should be "low or minimal". Countries have interpreted, unilaterally or in request-offer type negotiations, the term "low or minimal" in different ways, and in some cases also with some variance across products (see table 2.3.2). The EU has generally tended to set within-quota tariffs under minimum access at 32 per cent of above-quota tariffs, with some notable exceptions where within-quota tariffs are a smaller percentage of above-quota tariffs. In Japan, within-quota tariffs for many products are only a small fraction of above-quota tariffs. The US Schedule includes minimum-access commitments for a number of specific dairy products and specifies the quantities of the respective TRQs.[26] However, within-quota tariffs for these TRQs are not specified in the Schedule.

2.4 Domestic Support

33. If tariffication in the UR was "dirty", it may well be asked whether the process of establishing domestic support commitments has been equally "dirty", in the sense that the AMS calculated by countries is higher than what would be truly representative of their level of domestic support. A direct analysis of this issue would require an amount and a quality of data which go beyond what can be managed within the limited scope of this study. However, a rough impression can be provided by comparing AMS values with total PSEs as calculated by OECD for the corresponding period. Such a comparison is problematic for a number of reasons, three of which are particularly important.

34. First, PSEs include only a limited number of selected (important) products, while the AMS is supposed to cover all relevant agricultural and food products to which the totality of the AoA applies. As far as this distinction is concerned, the AMS would tend to be higher than the total PSE for the same country. Secondly, while PSE calculations aim at including the totality of all policies which provide support to producers, the AMS includes only a subset of policies. In particular, market-price support not provided through domestic administered prices (but, e.g., through export subsidies) is not included in the AMS. Also not included are policies which are production neutral ("green box"), which are small ("*de minimis*"), and direct payments under supply control programmes meeting specific criteria (tailored to cover USA deficiency payments and EU compensation payments, "blue box").[27] This second distinction tends to make the AMS smaller than the PSE. Thirdly, the market price-support element in the AMS is calculated on the basis of administered prices (e.g. intervention prices), while PSE calculations are based on farm-gate prices which are often below the administered prices. Hence, this third factor tends to result in an AMS larger than the PSE.

35. In comparing AMS and PSE values, the difference in product coverage can be taken into account by calculating an adjusted AMS that includes only those products that are also included in PSE calculations. This has been done in the figures presented in graph 2.4.1. The resulting AMS values are below PSE values for all three countries included, though to varying degrees. However, for the reasons given above, this fact cannot be interpreted as indicating that there was no "dirt" in the base period AMS calculations. Hence, no answer can be provided here as to whether base-period AMS values are exaggerated or not.[28]

36. One particular element in the Modalities provisions for base-period AMS values allowed countries to claim "credit" for "actions undertaken since the year 1986". This somewhat obscure provision essentially meant that countries had a choice whether they wanted to use the 1986-1988 average AMS or the (higher) value for 1986 as the starting point to calculate their domestic support commitments.[29] All three countries covered here have made use of that option. As a result, the base-period AMS is above the 1986-1988 average by 4 per cent for the EU, by 13.5 per cent for the USA and by 15.2 per cent for Japan.

2.5 Export Subsidies

37. The new commitments on export subsidies have often been said to be the potentially most effective and hence the most important element of the AoA. As this view already prevailed during the negotiations, efforts were made to define, as precisely as possible, the commitments countries were expected to accept. Also, what countries had put into their proposed Schedules was probably scrutinized with a particular amount of care during the verification process. Data checking cannot have been too difficult at this stage, at least not for the quantities exported with subsidies (though budgetary outlays in partner countries may have been somewhat more difficult to assess). As a result, one should assume that there was not too much scope for implementation "flexibility" in turning the Modalities provisions on export subsidies into Schedule commitments. However, there were at least two elements where countries had some sort of choice as to how to make their commitments. One concerns the grouping of commodities into aggregates; a second had to do with what was called "front loading".

38. As far as commodity grouping is concerned, the Modalities specified a list of 22 product groups which at first glance appears unambiguous (see table 2.5.1). However, countries have occasionally taken some liberty as to how they allocated individual more specific products to these groups. For example, rather than specifying commitments for the two product groups of "fruit" and "vegetables", the EU specified commitments for the two groups "fruit and vegetables, fresh" and "fruit and vegetables, processed" (see table 2.5.1). Some other countries not covered here have taken more liberty in defining product groups for export-subsidy commitments.[30]

39. The "front loading" provision had to do with the fact that in some cases subsidized exports had continued to increase significantly after the 1986-1990 base period (see Section 2.1). In this situation, some countries felt that an immediate reduction to levels below those in the base period was too difficult to achieve. Hence, a provision was agreed that in specified cases reduction commitments could start from the higher levels realized in 1991-1992 (or, in other cases, the average of 1991-1992 and the base period). This option did not affect the allowed levels of export subsidization at the end of the implementation period (which still had to be calculated from base-period levels), but it did provide for the possibility to have higher subsidized exports during the first years of the implementation period. In some cases, recourse to this provision has allowed countries to expand the volume of allowable subsidized exports significantly beyond what would have been acceptable in the absence of this front-loading option (see graphs 3.4.1 to 3.4.8). Notable cases in the EU are wheat (where front loading has added 8.3 per cent to the total volume of allowable subsidized exports during the implementation period), beef (plus 6.2 per cent), and poultry meat (plus 11.7 per cent). In the USA (not shown in a graph), front loading has, for example, added 99 per cent to allowable subsidized exports of other milk products, 72 per cent to rice, 59 per cent to eggs, and 57 per cent to vegetable oils.

3. How Binding Will Commitments Be?

40. Whatever the process was through which commitments were established, they have become embodied in the Schedules and now define the scope for future policies in the countries concerned. As reductions have to be made in all areas covered by the AoA, there will be a tendency for commitments to become more binding over time. On the other hand, there may well be some slack in the commitments, in the sense that they do not require major, or any, policy changes in the years to come. To a large extent, this depends on the quantitative parameters in the Schedules, relative to the current situation in policies and on markets. Also, the extent to which commitments will effectively constrain policies will differ between the different types of commitments.

3.1 Tariff Bindings

41. Tariff levels that have resulted from tariffication are in part high, both because price gaps between domestic and world prices in the base period were high, and because of what was called "dirty tariffication". Tariff rates for some important individual products in the countries covered are shown in table 3.1.1.[31] In some cases, tariff rates are in the order of magnitude of several hundred per cent.

42. In many cases, it is likely that "normal" tariffs as high as the ones now bound will be prohibitive, and in such cases no imports may actually occur outside the minimum-access and current-access commitments. For example, it is expected that cotton imports into the USA will continue to be small even after tariffication.[32] Also, it is unlikely that the EU will import sugar under the new "normal" tariff. Without a more detailed analysis, it is impossible to say how much "water" there is in any particular tariff (i.e. what the redundant part of the tariffs is beyond the point where they become prohibitive).[33] However, it appears that trade flows in the next few years will, in many cases, not really be increased as a result of the new tariff regime that has resulted from tariffication. In other words, the new tariffs will often turn out not to change market conditions.

43. In addition to this traditional "water" in the tariffs, there are cases in which there is also "policy water" in the tariffs, in the sense that domestic policy prices have been reduced since the base period, and/or world prices have increased, such that a tariff lower than the one bound would now suffice to defend the domestic policy price. In order to illustrate this issue, the amount of this "policy water" in the tariffs has been estimated for some illustrative cases. For this purpose, the calculation of tariff equivalents as done by countries in establishing their Schedule bindings has been repeated for a more recent period. Domestic prices originally used by countries in their calculations have been adjusted in proportion to the changes in domestic prices between the base period (1986-1988) and 1993, as documented by OECD in PSE calculations.[34] World market prices originally used have been adjusted in the same way. The resulting tariff equivalents are those which would have resulted had the year 1993 been used as the base period for tariffication. In other words, the tariffs calculated here would have been "required" in 1993 to defend domestic policy prices in the same way as the tariff equivalents actually bound were thought to be needed to defend them in the base period 1986-1988. Because domestic policy prices have, in some cases, been reduced between the base period and 1993 and world prices have increased, the tariffs "required" in 1993 were sometimes already lower than the ones bound (see table 3.1.2). For example, "required" tariffs on cereals in the EU and on butter and sugar in the USA in 1993 were below the bound initial tariffs, and in cases of butter and sugar in the USA even below the final tariffs.[35] The difference between the tariffs actually bound and these re-calculated tariff equivalents is the "policy water" referred to above. As domestic prices have often been reduced further since 1993, and world prices have increased, there will be even more "policy water" in the tariffs as the implementation period starts. In other words, in such cases the tariffs bound will not constrain actual policy prices, at least not for the time being. As a result, in many cases actual import prices will not be forced down by the AoA.[36]

44. In a number of cases, tariffication will change past policies less than what might be expected at first glance. Two examples are the entry price system for fruit and vegetables in the EU, and state trading. Before the Uruguay Round the EU had an import regime for fruit and vegetables which relied on reference prices and supplementary levies when imports depressed market prices below those reference prices. In the process of tariffication, the EU did not simply replace that system by flat-rate tariffs. Instead, it created different tariff lines for imports with entry prices above specified levels (where simple *ad valorem* tariffs apply) and imports entering at prices below those levels (where a specific tariff with a specified maximum level can be added to that *ad valorem* tariff). In effect, that new system may affect trade in a manner rather similar to the old regime. Moreover, implementation of the new regime can become complicated as mechanisms will have to be used which allow actual entry prices to be monitored, making sure that over-invoicing is detected and does not undermine the intended effects of the regime.

45. Under the AoA, countries are not required to eliminate government-controlled trading monopolies, though these monopolies must no longer use policies which have the nature of non-tariff barriers to trade. Hence, Japan can continue to control importing activities under its Food Agency. State-trading in Japan will continue for rice, wheat, barley, skim milk, butter and silk. However, in the process of tariffication (and hence elimination of non-tariff measures), Japan has accepted commitments regarding maximum levels of mark-up charged on imports under state-trading. Private companies can import at the higher "normal" tariffs, but it is expected that such private imports will remain negligible for the products concerned.[37]

46. In other words, tariffication and implementation of the new bound tariffs may in effect result in smaller changes of actual trading conditions than might be expected. On the other hand, it must not be overlooked that the agreement to convert non-tariff measures to tariffs will require changes in the instrumentation of many border policies in the countries concerned. Moreover, the fact that bound tariffs now exist prevents countries at least from raising their levels of protection in the future. It also creates a much better basis for future negotiations on further reductions of levels of protection. It should also not be forgotten that in the area of market access, agriculture is now in some sense one step ahead of industry: nearly 100 per cent of all agricultural tariffs are now bound, while the same cannot be said of manufactures.

3.2 Effectiveness of Tariff Rate Quotas

47. Tariff rates quotas under minimum-access commitments have been made part of the AoA, essentially to guard against too high (i.e. prohibitive) initial tariffs as resulting from tariffication. However, there is no absolute guarantee that they will actually serve this purpose, and hence that they will affect actual trade flows and constrain policies of the importing countries. It has to be remembered that there is no commitment to import, but only a commitment to charge no more than the specified reduced rates of tariffs on the products and quantities specified. Whether imports will actually come in under the TRQs will depend on whether these reduced tariffs are still prohibitive or not. In many cases, within-quota tariffs may be sufficiently low for quotas to be fully utilized. During the verification exercise, exporting countries had much of an interest to make sure that within-quota tariffs were set at a sufficiently low level. However, it is possible that there are also cases where even within-quota tariffs are so high that quotas may not be filled, such that market access is provided only in theory, but not in practice. A quantitative analysis of this important issue is unfortunately beyond the scope of this study. In the end, the answer to this question will be provided by actual trade flows.

48. On the other hand, there are cases where imports have already grown since the base period, and minimum-access commitments therefore do not require a further expansion of imports as the implementation period begins. This has been the case, for example, for imports of wheat, barley, some dairy products and raw silk to Japan.[38] In such cases, implementation of the minimum-access commitments does not require major modifications of current policies.

3.3 Bound versus Current AMS

49. Absolute AMS figures do not tell very much about their policy implications. A somewhat better impression can be gained by expressing base-period AMS values as a percentage of agricultural GDP in the countries concerned (see graph 3.3.1). Roughly speaking, these percentages show which share of agricultural income can be provided by government support in the form of those policies which count under the domestic support commitments. In both the EU and Japan this percentage is rather high. In the base period, around three quarters of total agricultural income was provided through (accountable) government support. In future years, domestic support has to be reduced, but even with 20 per cent less allowable support the share of total agricultural income that can be provided through government support will still be high. Thus, from this general point of view, the domestic support commitment appears as a factor which may not constrain policies very much.

50. More important for future policy pursuit in practice, though, is the extent to which current policies need to be modified in order to honour the domestic support commitment. To a large extent, the answer to this question depends on policy adjustments already made since the base period, which may or may not have made steps in the direction required to live within the AMS commitments. An exact quantification is difficult because of the many policies that may have to be counted under the AMS, and because of the large amount of data required to cover all relevant products. A simplified approach has been adopted here, which may suffice to indicate, at least roughly, the pressures on domestic policies which may, or may not, result from AMS commitments. Because of data availability, this approach has been applied only to the EU.

51. For the EU, an estimate of the current AMS for the years 1989 to 1995 has been made by assuming that all policies have remained constant after the base period, except for market-price support. The market-price support element of current AMS has been estimated on the basis of actual support prices and quantities produced in the years 1989 to 1995 (with production estimates for recent years for which data are not available yet). Compensation payments introduced as a result of agricultural policy reform in the EU have not been included as they fall in the "blue box". The results of this estimate are shown in graph 3.3.2. According to this estimate, the current AMS of the EU has already fallen significantly below the AMS commitment. The major reason is the reduction of price support due to EU policy reform, and the fact that EU compensation payments do not count against the AMS commitment. It is interesting to note that the PSE, as calculated by the OECD (also included in the graph), has not followed the downward trend of the AMS in the EU, mainly because it does not exclude compensation payments.

52. For Japan, the AMS has fallen so much during the base period that it was well below the AMS commitment already in 1988 (see graph 3.3.3). Major reasons were significant reductions of support prices for rice (by 10 per cent), beef (by 20 per cent) and pork meat (by 24 per cent) between 1986 and 1988. These price reductions are also reflected in a downward trend of the PSE for Japan during that period. For the USA, a rough estimate of the current AMS after the base period has been made by taking 1988 deficiency payments for PSE products out of the base period AMS as they now fall in the "blue box". As a result, the USA has also fulfilled its AMS commitments already before the implementation period for the AoA began (see graph 3.3.4).

53. In other words, the countries covered here have already achieved all of the required reductions in domestic support, in one way or another. Hence, their domestic support commitments will not act as a direct constraint on current agricultural policies, at least for the immediate future. However, the existing AMS commitments still prevent countries from sliding back to the types of policies, and levels of support, which they were used to in the base period. Moreover, it should be remembered that AMS commitments are set in nominal terms. Hence, with some inflation their binding power will tend to increase over time. For the countries covered here, this is unlikely to be a problem during the current implementation period, as their rates of inflation are likely to be so

low that they will not result in a significant erosion of the current redundancy of their AMS commitments. However, for countries with higher rates of inflation since the base period, problems can arise.

3.4 Reduction of Export Subsidization

54. Among all disciplines established under the AoA, the constraints on subsidized exports are likely to be the most binding elements, as has often been rightly observed. This is partly due to the fact that there was probably very little "dirt" in the figures used for establishing commitments, as mentioned above. However, it is also due to the increase in subsidized exports which has occurred between the base period and the beginning of the implementation period. Hence, relative to the volume of subsidized exports immediately before the implementation period, reductions in quantities which have to be made by the year 2000 are, in a number of cases, rather significant.

55. This is shown, for some illustrative products, in graphs 3.4.1 to 3.4.8. Cases where EU exports will have to be reduced particularly from recent levels are wheat, beef, pork and poultry.[39]

56. Generally less binding than the quantity constraints will be the constraints on budgetary outlays for export subsidies, even though the percentage reduction required is higher than that for quantities of subsidized exports. The reason is that reductions of domestic policy prices and increases in world market prices since the base period have tended to reduce the subsidy required per tonne. The EU, for example, has reduced its support prices for cereals by around 30 per cent between 1992 and 1995, and this has allowed export subsidies per tonne to decline by more than double that percentage (as export subsidies before the price reduction were less than half of the domestic EU price). At the same time, world market prices for wheat have recently risen so much that the EU currently needs only minimal per unit subsidies for being able to export wheat. But even if world market prices fall back to lower levels, the now much reduced domestic cereal prices in the EU mean that the outlay constraint on export subsidies for cereals is by no means constraining EU cereals policies (though the quantity constraint may be very binding).

57. In order to reduce quantities of subsidized exports, countries have to adjust policies. In that sense, the export subsidy commitments will effectively constrain policies. However, the precise nature of policy changes adopted can and will vary from case to case. For example, subsidies on US cereal exports under the export enhancement programme (EEP) have always covered only some part of all US cereal exports. With the reductions now required, the USA may just discontinue to subsidize exports to certain destinations, without reducing the total amount of exports noticeably. In the EU, on the other hand, a reduction of subsidized cereal exports may be possible only with further explicit adjustments to domestic policies, unless world market prices were to rise so much that they reach the level of domestic EU market prices and exports become possible without subsidies. The major options open to the EU are more restrictive supply controls (probably in the form of a higher percentage of required set-aside) and a reduction of support prices to the level of world market prices. The domestic market implications of these two options would differ very much, as could their effects on trade in some other products (in particular cereal-based livestock products).[40] However, it would be up to the EU to decide on how it wants to proceed in this regard, and the AoA does not prescribe the nature of the policy action to be taken.

4. Implementation of the Commitments

58. The process of implementing the commitments that countries have made in their Schedules is still at a very early stage (at the time of this writing, i.e. June 1995). Implementation begins at various dates during the year 1995, and for a given country usually starts at different dates for different types of commitment and different products. In the WTO Committee on Agriculture (CoA), agreement has been reached on notification requirements and working procedures which will constitute the basis of the process of reviewing the implementation

of commitments, as envisaged in the AoA. Notification requirements are extensive.[41] However, at the time of writing, only a limited number of notifications have been submitted, and only in the area of market access. Hence it is still too early to engage in an extensive analysis of actual Schedule implementation. However, some issues that may be relevant in the implementation process can be flagged.

4.1 Full versus Partial Use of Tariffs Bound

59. The tariffs bound under the AoA (as any other tariffs bound in the WTO) are maximum tariffs. Countries can always decide to apply tariffs below the bound rates. Also, countries could choose to vary the tariffs applied from time to time, as long as the bound maximum level is never exceeded and certain general rules under the GATT are observed, in particular Articles I (MFN treatment), II (consistency with Schedules), and X (timely publication and uniform administration). It will therefore be interesting to see whether countries will actually apply all tariffs at the bound levels, or whether some tariffs will remain below that level. It will also be interesting to see whether in some cases tariffs will be varied from time to time, such that, in effect, they may come close to variable levies as used in the past, for example, by the EU.

60. At the time of this writing, comprehensive information on these matters is not yet available. However, it appears that the three countries covered here will tend to use nearly all tariffs at the bound level. One notable exception are the cases of some cereals and rice in the EU. In these cases, the EU has committed itself, as a result of the Blair House agreement, in its Schedule not to apply tariffs which would result in duty-paid import prices above given percentages of its domestic intervention prices. The EU has recently decided on a mechanism which essentially comes close to its traditional variable levy system, though with some notable modifications. However, the implementation of this EU commitment is still an issue between the EU and some of its trading partners, above all Australia, Canada and the USA. One particular problem is that in the way this EU commitment was phrased it may be required to make sure that no individual consignment is charged more than the tariff that would equalize the duty-paid price with the price limit agreed by the EU. On the other hand, as has been pointed out,[42] a strict application of such a requirement could lead to rather perverse results and economic inefficiencies.

61. Application of tariff rates less than the ones bound under the AoA would be possible, and indeed economically desirable, in cases where a significant amount of "policy water" is included in the bound tariffs (see Section 3.1). Moreover, there are cases where application of the full-bound tariff results indeed in an increase of the duty/levy charged at the point in time when implementation of the new tariff starts. Two notable cases are oats and grain-based livestock products in the EU.

62. Oats are not included in the EU commitment of not charging tariffs, such that a given price in relation to the EU intervention price is not exceeded (because there is no intervention price for oats in the EU). At mid-1995, the import levy for oats actually applied by the EU is around 110 ECU per tonne. The bound EU tariff on oats, which will be applied as of 1 July 1995, is ECU 139 per tonne. In other words, rather than resulting in a liberalization of imports, tariffication of oats in the EU, and full application of the bound tariff, will result in an increase of the tariff applied by around one quarter. The reason behind this tariff increase is the fact that the EU has reduced its policy prices (including the threshold price used to calculate the variable levy) for cereals significantly after the base period for tariffication, as a result of its agricultural policy reform decided in 1992. The bound tariff, however, is based on the regime which existed in the 1986-1988 base period. During the implementation period, the EU tariff on oats will go down to ECU 89 per tonne, and it may then be closer to what it would have been had the regime applicable before 1 July 1995 continued to exist. However, as the implementation period starts, there will be a sudden increase in the tariff on oats imports into the EU (which, as a result, may disappear altogether).

63. For grain-based livestock, EU import levies used to be calculated on the basis of the difference between cereal prices (and hence feeding costs) between the EU domestic market and the world market. In the 1986-1988 base period for tariffication, this difference was still large, and hence tariffs on pork and poultry imports were large as well. As cereal prices in the EU came down after the reform of EU agricultural policy, so did levies on pork and poultry imports, and immediately before the implementation period they were significantly below the bound tariffs on these products (see table 4.1.1). In these cases, there will be a sudden increase in the duty charged, and in some cases by 60 per cent or more. Again, the bound tariffs will fall over the implementation period and things may improve. But in some cases the final tariffs will still be above the levies charged immediately before the new regime is introduced.[43] In other words, as the implementation period starts, trade in these products will not be liberalized, but made more difficult.[44]

4.2 Use of the Special Safeguard Provision

64. Another important set of issues in implementing the market-access provisions under the AoA relates to the Special Safeguard Provision which may be invoked for products that have undergone tariffication (Article 5 of the AoA).[45] This provision comes in two forms -- a price-triggered and a quantity-triggered provision. There are a number of uncertainties involved in both forms, some of which are of a technical nature.[46] The actual application of this Provision, which may not occur for some time, can be potentially trade disruptive, depending on its precise implementation. In the quantity-triggered form of the Special Safeguard Provision (SSP), an additional duty can in some cases be imposed already if imports exceed their average "during the three preceding years for which data are available" by no more than 5 per cent.[47] Given the usual lag in data availability in foreign trade statistics, a relatively small annual rate of import growth may suffice to trigger this provision. The maximum additional duty can be one third of the ordinary duty. No notification is required, and indeed possible, prior to the application of the quantity based SSP.[48]

65. Under the price triggered form of the SSP, an additional duty can be imposed if the c.i.f. import price of the shipment concerned falls below 90 per cent of the 1986-1988 average reference price ("trigger price"). The more the c.i.f. price falls below that trigger price, the higher the additional duty can be, in accordance with a precise schedule included in the AoA. Under this form of the SSP, one potential problem again is the consignment-specific application of the additional duty which, like in the case of the specific arrangement for tariffs on cereal imports into the EU, can lead to all sorts of strange results. Another important issue is the level of the trigger prices countries may want to use.

66. The definition of that trigger price, contained in a footnote to the relevant Article of the AoA, is similar to that of the external reference price to be used in calculating tariff equivalents for the tariffication exercise. However, as the level of commodity aggregation for application of the SSP (tariff line) is different from that used for tariffication (somewhat broader products), countries can claim to have a good reason for using trigger prices which may deviate significantly from those used for tariffication. Countries were not required to include intended trigger prices in their Schedules. The relevant footnote in the AoA says that the trigger price "shall, following its initial use, be publicly specified and available to the extent necessary to allow other Members [of the WTO] to assess the additional duty that may be levied". The notification requirements agreed in the CoA suggest that countries can also notify these prices up front, i.e. before they begin to use them under the SSP, or, alternatively, as soon as they begin to charge an additional duty under this provision.

67. Among the countries covered here, the USA has notified a list of trigger prices. Japan has notified, and obviously begun to use, trigger prices for some types of starch.[49] The EU had annexed a list of intended trigger prices to its final offer before Marrakesh. At the time, that list did not have GATT legal

status. However, that same list is now considered to be made part of the notification process under the CoA. Table 4.2.1 compares, for a few selected products, trigger prices earlier submitted by the EU and more recently notified by the USA with the external reference prices used by these countries in the tariffication exercise. For both countries, a tendency to use high trigger prices is obvious, which in turn could result in more frequent recourse to the price-triggered SSP and to higher additional duties than what would be the case were trigger prices used that are more in line with the external reference prices used for tariffication. In some cases, the trigger prices appear to have been calculated on the basis of unit values of actual imports, including (or indeed consisting mainly of) imports under preferential conditions (and hence attracting higher prices than "ordinary" imports). For example, the EU trigger price for sugar, which is in the order of magnitude of the EU domestic intervention price, appears to be based on preferential EU sugar imports from a number of ACP countries under the sugar protocol attached to the Lomé Convention. Equally, the US trigger price for sugar is probably based on unit prices of sugar imported preferentially into the USA from Caribbean countries. The EU trigger price for butter presumably reflects the high price of butter imported into the EU under preferential terms from New Zealand. In all such cases, trigger prices are far above prices on "normal" markets, and this is clearly visible by the large difference between the trigger prices and the external prices used for tariffication of equivalent products. If such trigger prices were indeed used in these cases, then chances for any non-preferential exports to gain access to the markets concerned would be even further reduced.

68. However, it should be remembered that countries can also decide not to use the SSP at all, or to make more restricted use of the SSP than would be possible under the AoA. Trigger prices actually applied can be lower than the ones notified (or domestically determined); imports can be allowed to grow more than the agreed minimum rates before the quantity triggered provision is invoked; additional duties imposed can be less than what would be possible under the Agreement. The more restrictive actual use of the SSP will be in the future, the more all participants will be able to reap the potential benefits of tariffication.

4.3 Allocation of Licences under Tariff Rate Quotas

69. Given that many tariffs that have resulted from tariffication are very high, some more immediate improvements in market access under the AoA may have to come from the minimum-access commitments. It is thus important how countries will implement the TRQs established under their minimum-access commitments. Moreover, there are now many new TRQs that have resulted from current access commitments. In this context, one important issue is how licences will be allocated which allow imports under the reduced tariff within the quota. This issue is important because major monetary gains may be derived from such licences. Where the difference between the domestic price and the world price exceeds the within-quota tariff, a quota rent accrues to the holder of the licence. In these cases, interest in obtaining licences will be high among the agents concerned, and some form of allocation mechanism needs to established. The mechanism used will then have direct implications for the income distribution resulting from quota rents, but it may also affect trade flows. The additional access to developed countries' markets that developing countries can expect as a result of the AoA may therefore very much depend on the way in which TRQs are implemented.

70. Under the notification requirements agreed in the CoA, countries are expected to submit detailed information on the planned implementation of their TRQs to the WTO. Some notifications have already been made, but a comprehensive picture cannot be provided yet. However, in general there is a tendency to allocate licences to interested domestic parties. In some cases, the agents that have primary access to licences are those who could potentially be harmed by increased imports as a result of the AoA. For example, licences for butter imports may be given to processors (rather than to retail traders); licences for broiler chicks may be given to domestic hatcheries, in proportion to the number of chicks hatched in the preceding year. In other cases, licences are allocated

to historical importers, in proportion to their past import quantities. In still other cases, licences are issued on a first-come-first-serve basis, or based on similar rules.

71. A number of potential elements in allocation procedures are notable for their absence. First, with the exception of cases where bilateral agreements (open or behind the scenes) require that imports come from given exporting countries, it appears that governments tend to leave it to the importing companies where they want to buy. This may or may not be a problem. TRQs resulting from minimum-access commitments are supposed to be administered on an MFN basis. It is not clear what that means in practice. The relevant provisions are those in GATT Article XIII ("non-discriminatory administration of quantitative restrictions"), which according to its paragraph 5 also applies to tariff quotas. Art. XIII:2 requires that countries applying quotas "shall aim at a distribution of trade ... approaching as closely as possible the shares which the various contracting parties might be expected to obtain in the absence of" the quota. In doing so, the country applying the quota "may seek agreement with respect to the allocation of shares in the quota with all other contracting parties having a substantial interest in supplying the product concerned", or where "this method is not reasonably practicable", "allot ... shares based upon the proportions supplied ... during a previous representative period ..., due account being taken of any special factors which may have affected or may be affecting the trade in the product".

72. Even if countries were willing to follow these rules, they would find it rather difficult to do so in practice. The market shares which the various exporting countries would have in the absence of the quota can simply not be determined, with any degree of legally useful precision. Negotiations with (all) contracting parties having a substantial interest would often prove difficult. Reference to a previous period is not possible where a market is opened for the first time (or significantly more than in the past), as may be the case in a number of minimum-access commitments. Also, where increased trade results from minimum-access commitments it is not, from an economic perspective, clear that market shares supplied in the past are an appropriate indication of future competitiveness. However, it also appears that countries do not intend to implement mechanisms for allocating licences under minimum-access TRQs which would directly determine the countries of origin, except in cases of bilateral arrangements (where the MFN principle is, anyhow, not observed). Licences are issued to domestic companies, and it is then up to them to choose the source of imports. What happens if the resulting structure of trade flows appears to be inconsistent with the provisions of GATT Article XIII remains to be seen when a case like that is taken to the WTO.

73. Also notable for absence are quota allocation procedures that would allow companies from foreign (i.e. exporting) countries to obtain licences for imports under reduced-tariff TRQs. In theory, there is no reason why only domestic companies should be entitled to apply for quota licences. However, in the practice of rent seeking, it is obvious why governments have a tendency to issue licences, and thereby distribute rents, to domestic agents rather than to foreign citizens. In practice, there may in these cases be an incentive for exporting countries to set up subsidiaries in the importing countries, in order to have better access to markets. Developing countries may want to explore that option where they otherwise have difficulties in gaining market access.

74. Finally, absent among the countries covered here are, so far, also cases where governments intend to auction licences under minimum-access TRQs.[50] From an economic point of view this is unfortunate. The auctioning of licences would indeed be an ideal way of solving several problems at the same time. At the level of the private trade, auctioning would do away with the problem of how to distribute the right to earn rents to individual companies. At the level of exporting countries, auctioning would tend to create "a distribution of trade ... approaching as closely as possible the shares which the various contracting parties might be expected to obtain in the absence of" quotas. After all, if licences are auctioned to trading companies, these companies would tend to buy from the cheapest sources, and these sources would also supply the product in

the absence of quota restrictions. Hence, the auctioning of licences under tariff rate quotas is a most effective way of arriving at an MFN allocation of quotas. Any other method of allocating licences is potentially more contentious, at both the country and the company level. Ideally, the auctioning of licences would be implemented such that any company, from any country, is permitted to participate (i.e. participation should not be limited to companies established in the importing country). In the WTO, however, the auctioning of licences under TRQs is a potential legal issue. In particular, it could potentially be argued that fees paid in an auction are additional charges on imports, over and above the bound tariffs, which are inconsistent with GATT Article II. It is desirable to find agreement on this issue soon.

75. Licences will also have to be allocated under the TRQs that have resulted from current access commitments. In these cases, the situation is somewhat different as TRQs are often earmarked for given exporting countries that had market access before the UR. Where this is the case, newcomers will not benefit from market access provided under the AoA because trading relations are essentially frozen. Developing countries that did not belong to the traditional beneficiaries of such current access arrangements will not find their situation improved.

76. Another issue of a similar nature is the continued existence of state-trading in Japan. For a number of products, imports under TRQs will continue to be controlled by the state-owned monopoly, and since above-quota tariffs are high these state-controlled imports may be most, if not all, of what is imported of the commodities concerned. Under its minimum-access commitment for rice, hotly debated in Japan, the government's food agency "will decide specifics regarding exporting countries, quantities from each country and import schedules, taking into account the overall demand situation from wholesalers, retailers and consumers".[51] Actual imports will, however, be conducted by private companies that win tenders under a specified competitive bidding system. The 14 companies that have been granted licences to import rice when Japan began to implement its minimum-access commitment in April 1995 include two foreign-owned firms operating in Japan, one from Australia and one from the USA. Two firms, including a Canadian-owned company, have been newly licensed to import wheat and barley. This is the first time that foreign companies have been allowed to participate in grain imports to Japan.[52] In practice, there may in the end not be much of a difference compared to what could be expected in the absence of state-trading. However, it will be important to monitor the outcome of trading activities in this state-controlled regime, and to assess their consistency with the MFN principle and other GATT rules concerned.

77. Notification procedures agreed in the CoA require importing countries to report annually their import quantities under TRQs, and provide for the possibility that exporting countries can request information on quota use more frequently. It is to be hoped that heavy-handed interference with the sources of trade flows under TRQs will nevertheless not prevail. The weaker exporting countries, in particular, could be left at the fringe if power play were to be used in order to secure guaranteed shares for given exporting countries.

4.4 Use of Green and Blue Box

78. For the countries covered here, it appears that their AMS commitments will not be strongly binding in the immediate future (see Section 3.3). Hence, with their current policies, implementation of these commitments is unlikely to be a major issue for them. However, should they consider pronounced policy changes, the implications for current AMS would have to be taken into account. Also, as the reform process continues beyond the current implementation period the unutilized part of their AMS bindings may become smaller and smaller. Other countries may be in that situation earlier, and implementation of AMS commitments may become more of a problem for them.

79. Given the nature of the domestic support commitments and the characteristics of the data required to calculate current AMS values, notification of current AMS calculations can occur only ex post, i.e. after the

year to which they apply. One will therefore have to wait a while before problems encountered in this context become visible. However, one of the potentially most important implementation problems in the area of domestic support may surface earlier, i.e. the classification of policies into categories that are exempted from reduction commitments or that do not need to be included in the calculation of current AMS. Exempt from reduction commitments are policies which fall in the "green box". Inclusion in current AMS calculation is not required for "blue box" policies and for support below the *de minimis* thresholds.

80. Green box policies need to meet a number of criteria. For the potentially most contentious category of green box measures, i.e. direct payments to producers, Annex 2 of the AoA contains a (non-exclusive) list of eight policies (decoupled income support, income insurance, etc.). For each of them, a number of criteria is provided which need to be met if such policies are exempted from AMS calculation. However, it is important to remember that at the same time policies exempted from AMS calculation have to meet the basic criteria set out in paragraph 1 of that Annex 2, i.e. "that they have no, or at most minimal, trade distortion effects or effects on production", that they must be financed by the government (rather than involving transfers from consumers), and that they shall not provide price support to producers. It appears that the rather detailed and practical list of policy-specific criteria in the latter part of Annex 2 has sometimes distracted attention from these important general criteria.

81. Hence, when countries begin to claim that some of their policies fall in the green box they may occasionally be surprised to find that others may raise doubts based on the general criteria. In this context, a potential problem built into this part of the AoA is the apparent inconsistency between some of the policy-specific criteria and the general criteria. From the point of view of economic analysis, a number of policies which meet the respective policy-specific criteria have more than minimal effects on production and trade. Clearly, in these cases it should be sufficient to show that the general criteria are violated, and countries should then not be allowed to classify these policies as green. However, it is easy to imagine that the countries concerned will be unhappy, claiming that they have done everything to make sure that their policies meet the specific criteria, and that there is no point in having these specific criteria if they do not allow identification of appropriate policies. In the end, much may have to depend on the interpretation of what is a "minimal" trade distortion or production effect.

82. The blue box has resulted from the Blair House agreement between the USA and the EU, and was opened up to accommodate US deficiency payments and EU compensation payments. However, as it was established as a general provision all countries have access to it. It remains to be seen whether other countries find the blue box an attractive option to reduce the level of their current AMS. If it is invoked, a number of issues can arise. For example, when is a programme production-limiting? If payments are based on fixed area and yields, or in the case of livestock payments on a fixed number of head, is there any restriction to the level at which area, yield and number of head must be fixed? Does this level have to be below that prevailing in the base period, even though the text of the Agreement does not say so explicitly? Also, nothing is said about the requirement to produce in order to be eligible to receive payments. What happens if the level of payments is based on a fixed output, but producers are required to produce a higher output in order to receive these payments?

83. Another important issue in implementing the domestic support commitments is inflation, which may push the current AMS against the bound AMS as defined in nominal terms. Some countries, for example in Central Europe[53] but also some developing countries, may run into this problem soon. The AoA has a clause which says that in monitoring the implementation of the Agreement "due consideration [shall be given] to the influence of excessive rates of inflation on the ability of any [WTO] Member to abide by its domestic support commitments". When inflation is "excessive" and what the implications of "due consideration" may be remains to be seen when the first case of this nature is discussed in the CoA.

4.5 Allocation of Export Subsidies

84. Given the fact that the most immediately effective trade implication of the AoA is expected to result from the export subsidy commitments, implementation of that part of the Agreement will probably be watched with particular attention. Countries are expected to notify both quantities exported with subsidies and budgetary outlays. Also, in order to create a basis for monitoring Agreement rules on circumvention (Article 10 of the AoA), countries are expected to submit information on their total exports and on food aid provided. Some more technical issues may arise in assessing such statistical information and its consistency with the commitments. For actual trading relations, the more important issues may, though, originate from the domestic procedures that countries will use for allocating rights to the limited export subsidies to individual exporting activities.

85. Basically, three types of allocation decision have to be taken by national administrations in this context. First, which trading companies have access to export subsidies? Secondly, which specific products within the individual product groups for which commitments are defined are given priority? Thirdly, how shall export subsidies be allocated to countries of destination? The AoA provides little guidance on any of these questions. Domestic implementation procedures in exporting countries, to the extent that they have already been established, generally appear to leave much scope, in particular regarding the second and third questions.

86. In the process of monitoring the implementation of export subsidy commitments, it may be useful to consider some basic principles regarding the allocation of limited export subsidies to specific products and countries of destination. As far as allocation to products is concerned, trade distortions would be minimized if subsidy rates per unit of raw product were equalized (in percentage terms) across products. Regarding countries of destination, two alternative options could be considered. One would be to keep differences of subsidy rates between different destinations as small as possible for a given product. In terms of the efficiency of global resource use, this option would appear particularly attractive. Alternatively, countries of destination could be grouped according to needs, based on overall economic conditions and food requirements. Priority could then be given, within the limitations on export subsidies, to countries in particular need. This latter approach would emphasize the distribution implications of export subsidies, and it may be particularly attractive from the point of view of developing countries.

5. Summary and Conclusions

87. The Agreement on Agriculture concluded in the Uruguay Round has created a new situation in world agriculture. There is now a framework of rules and commitments which goes far beyond anything existing, in agricultural trade, before this round of GATT negotiations started. While GATT rules on agricultural trade were vague and weak in the past, governments now have to observe clearly defined constraints when making agricultural policy and trade decisions. Most important, all participating countries now have Schedule commitments in quantitative terms which define what they can and cannot do in the areas of market access, export competition and domestic support. The rules under which these commitments were established were relatively clear-cut. However, the way in which they were implemented when it came to inserting numbers in the Schedules differed significantly from case to case. With the start of the implementation period under the Agreement in 1995, a new stage is reached. It will now be important to monitor the way in which Schedule commitments are implemented in the years to come.

88. This study has looked at some of the more important implementation issues in these two stages, i.e. the implementation of rules for establishing commitments in the Schedules, and the implementation of these commitments in the years to come. Three major developed countries are covered -- the EU, Japan and the USA.

89. For establishing commitments, a starting point had to be agreed. The base period chosen, i.e. the second half of the 1980s, allowed countries to establish high levels of protection in the process of converting non-tariff barriers into bound tariffs. For commitments regarding export subsidies and domestic support, that base period was not excessively generous. Tariffs bound are, moreover, often higher than the equivalent of barriers existing in the base period. In allocating the required unweighted average rate of reduction to individual products, countries have shied away from making tariffs more uniform. Indeed, tariff dispersion has increased, and market access may be improved considerably less than what would have happened had tariff rates been better harmonized across products. Also, in a notable number of cases tariff escalation is now worse than before the Uruguay Round. In establishing tariff rate quotas under minimum-access commitments, countries have occasionally shown remarkable ingenuity. The extent to which base period AMS values truly represent past policies is difficult to assess. In establishing export subsidy equivalents, the option of "front loading" has allowed the provision of some noticeable extra exports in the early years of the implementation period.

90. When it comes to assess the extent to which the new commitments established under the AoA will bind actual policies it turns out that many tariffs are so high that they will not constrain current price policies. In many cases, normal tariffs outside tariff rate quotas are likely to be prohibitive, at least at the beginning of the implementation period. In these cases, exporting countries will have to look mainly at the more favourable tariffs within tariff rate quotas. However, even within-quota tariffs under minimum access commitments may in some cases be so high that new trade flows may remain small. For the countries covered in this study, domestic support commitments are such that they will not require policy changes beyond those which have already taken place since the base period. The most binding commitments will be those relating to export subsidies. In some cases, subsidized exports will have to be reduced significantly from their levels immediately before the start of the implementation period. It will be interesting to watch which domestic policy options the exporting countries will adopt when they find that their export subsidy commitments become binding. Depending on the particular policy responses chosen, trade flows of both products concerned and related products can be affected significantly.

91. Implementation of Schedule commitments is still at an early stage, and has not yet started in some cases. However, a number of issues can be flagged at this time. As countries begin to implement the new tariff bindings, they do not have to apply tariffs at the full bound level. Actual use of lower tariffs should be considered where the bound tariffs are higher than needed to defend current levels of domestic policy prices. In particular, there are cases where full implementation of the bound tariffs will result in an increase of duties charged as compared with the situation prevailing immediately before the implementation period. In these cases it is desirable to apply tariffs below the level of bindings. Implementation of the Special Safeguard Provision can disrupt trade flows, and cautious use should be made of that provision. Trigger prices should be set as low as possible, and not above a level equivalent to that of external reference prices used for tariffication.

92. Given the growing significance of tariff rate quotas under the Agreement, procedures used for allocating licences under quotas will form an important part of implementing the new commitments. Thought needs to be given to procedures which honour the MFN principle in practice. Transparent mechanisms should be used for allocating licences, and participation should be open to all interested parties, including agents from exporting countries. An option which should be considered constructively is the auctioning of licences.

93. Under the domestic support commitments, classification of policies into the "green" and "blue" boxes is a potentially contentious issue. Treatment of cases where "excessive" rates of inflation have eroded the real value of domestic support bindings will have to be decided.

94. Implementation of export subsidy commitments will require decisions as to how to allocate limited quantities of allowed subsidized exports to individual

products, countries of destination and trading companies. Subsidy rates should be equalized across products. As far as countries of destination are concerned, a balance has to be found between efficiency considerations and equity concerns.

95. In the implementation of Agreement provisions and Schedule commitments by developed countries, some issues are of particular importance to developing countries. Developing countries will want to see to it that increases of duties charged on their exports as the implementation period begins are avoided wherever possible, even though the importing developed countries may in legal terms have the right to charge the higher bound duties. With regard to the Special Safeguard Provision it is important to convince developed countries that they should not use too high trigger prices, and that restraint is shown in invoking the Special Safeguard Provision in cases of particularly low-priced exports from developing countries. When it comes to allocating licences under tariff rate quotas, developing countries will want to see that developed countries make sure that the MFN principle is applied in full. Also, ways should be explored that allow exporting companies from developing countries to participate in licensing procedures effectively and successfully. In the area of export subsidies, food-deficit developing countries will want to see that developed countries give priority to their need in allocating limited quantities of subsidized exports to countries of destination.

96. The Uruguay Round Agreement on Agriculture and the commitments established under it are far from perfect. They do not establish free trade and they do not require governments to eliminate all distorting agricultural policies. The country Schedules contain commitments that could have been better in line with what was hoped to be achieved by the Agreement. Implementation of the commitments as starting now may hold some unpleasant surprises. However, it would be wrong to assess the Agreement against an ideal world. Its achievements are better assessed in comparison with the state of affairs in agricultural trade before the Uruguay Round began. From this perspective, the Agreement is a historical achievement, and a quantum leap forward. For the first time in the history of agricultural trade, it will be possible to judge countries' policies in agriculture and trade against a well-defined set of commitments and rules. In implementing these commitments and rules, a guiding principle should be that fairness and efficiency is in the interest of all trading nations. Also, lessons learned in implementing the Agreement should form a good basis for structuring the negotiations on the continuation of the reform process started in the Uruguay Round. With the new rules and commitments now existing, there is a good prospect that this next round of agricultural negotiations will make another big step forward.

1. See Josling, Tangermann, Warley (forthcoming), chapters I to VI.

2. GATT document MTN.GNG/MA/W/24, 20 December 1993.

3. It appears, however, that only a very limited number of adjustments to the final offers were made during the verification process.

4. In particular, the text of the Modalities states that "these negotiation modalities shall not be used as a basis for dispute settlement proceedings" under the WTO.

5. For simplicity, these three participants are here called countries, even though the EU is not a country.

6. For a more comprehensive discussion of the AoA, see Tangermann (1994).

7. It should be noted, though, that there are pronounced differences between total gross PSE (the measure used here) and the AMS. These differences will be indicated in Section 2.4.

8. This graph shows index numbers, rather than absolute values, and thus does not allow a comparison of PSE levels across countries.

9. An exact tariff equivalent, in this sense, is the difference between the domestic market price and the c.i.f. import price of the product concerned during the base period.

10. A case where negotiations on the appropriate tariff equivalent was reported is the US tariff on beef, see IATRC (1994). For PSE calculations in OECD, Australia and New Zealand wanted the US support level to be calculated from a high domestic and a low world market price. When it came to tariffication in the UR, the United States was happy to use these prices, but then negotiators from Australia and New Zealand convinced the United States to use prices, which resulted in a lower tariff equivalent.

11. See, for example, Borrel (1994).

12. See Koester et al. (1988)

13. Another possible, but not necessary, implication of unbalanced profiles of protection can be effective protection of processing activities ("tariff escalation"). This issue will be discussed later.

14. This analysis was based on the Schedules which can be purchased from the WTO in electronic form. Unfortunately these spreadsheet-based files contain most numeric entries in string format, and for quantitative analysis a cumbersome conversion to number format is necessary.

15. In the absence of better data availability, world market prices needed for this calculation were taken from the unit values of EU imports of the products concerned in the period 1993, as calculated from EUROSTAT External Trade Statistics, on CD ROM. Use of national statistics for each of the countries covered might have been preferable. On the other hand, use of one common denominator for all countries should improve comparability.

16. In these graphs, each little spot represents a product (at the tariff line level), with the base rate of tariff on the horizontal axis and the rate of tariff reduction on the vertical axis. For better visibility, base tariffs above 120% ad valorem equivalent have not been included.

17. Such "sensitive" products with tariff reductions by only 20 per cent in the EU are, for example, sugar, olive oil, wine, most fruit and vegetables and their first-stage processed products, and skim-milk powder. On the other hand, the EU has not reduced any tariff by less than 20 per cent, i.e. it has not used the possibility of reducing individual tariffs by only 15 per cent.

18. Much can be said against calculating unweighted averages of tariff rates, and some form of a weighted average would certainly be preferable. However, it is not obvious which weights should be used. In many studies, trade values are used. However, the resulting weighted average is strongly biased towards low tariffs, as imports tend to be the lower the higher tariffs are and may be zero where tariffs are so high as to be prohibitive. A more telling set of weights may be domestic production or consumption values (as used, for example, in Josling and Tangermann, forthcoming), as they tend to indicate relative domestic political importance. However, comprehensive production or consumption statistics detailed enough to match tariff lines are not available.

19. World-market prices used to convert specific tariffs to *ad valorem* equivalents were the same as for base tariffs.

20. The coefficient of variation is a measure of the variability of the observations concerned (i.e. in this case the variability of tariff rates). It is the standard deviation expressed as a percentage of the mean of the individual observations.

21. Even constant rates of tariffs along a processing chain provide protection to processing, at the rate of those tariffs. Thus, in order to avoid effective protection of processing activities, tariffs would actually need to de-escalate along processing chains. See Tangermann (1989).

22. In table 2.2.3, reduction rates at different stages of processing have been analysed. A plus sign indicates that the tariff reduction at the processing stage concerned is less than at the preceding stage of processing, and thus that (relative) tariff escalation has occured at this processing stage. A minus sign indicates the opposite situation, and zero indicates no change in (relative) tariff escalation. By definition, there is no tariff escalation, and hence no change of tariff escalation, at the level of the raw material.

23. In GATT legal terms, the trade regime for rice in Japan (and the few other cases of a similar nature) is not a TRQ, but a quantitative restriction, as tariffication has not taken place.

24. See IATRC (1994), pp. 29-30.

25. The EU Schedule is a notable exception, listing minimum access and current access TRQs separately.

26. The fact that US TRQs for a number of specific dairy products have historically originated from minimum-access commitments can only be inferred from the supporting tables accompanying the "final offer" of the USA, as TRQs in the US Schedule are not designated according to minimum and current access. It is only these specific dairy products where the USA has provided minimum access.

27. In the base period, however, no country had "blue box" policies which it did not count in the AMS.

28. Some more specific observations on AMS calculations by the EU can, however, be offered. For example, in calculating market-price support for cereals, the EU has used full intervention prices for 1987 and 1988, though the buying-in price (which was the effective support price) was decreased to 94 per cent of the intervention price from the 1987/88 crop year onwards. Also, the volume of production used in EU calculations was in some cases significantly above the production quantities published in official EU statistics.

29. In a way, this provision is somewhat similar to the front-loading provision applicable to export subsidies, see below.

30. Japan's Schedule does not have a table on export subsidies. As a result, Japan must not subsidize any exports in future.

31. *Ad valorem* tariff equivalents given in this table diverge from those presented in table 2.2.1 because of different world market prices used to convert specific tariffs into *ad valorem* equivalents. World market prices used in table 3.1.1 are EU unit import values in 1993 as used in the calculations presented in table 2.2.2.

32. See IATRC (1994), pp. 24-29.

33. For example, for a given product a tariff of 100 per cent may be prohibitive, i.e. sufficient to block any imports. If the actual tariff is 130 per cent, than the 30 percentage points beyond the prohibitive tariff level are redundant, and are called "water" in the tariff.

34. Data used are from OECD (1994). 1993 was the most recent period for which detailed PSE data from OECD was available.

35. As cereal prices in the EU have been further reduced since 1993 there is now even more "policy water" in these tariffs. On the other hand, for that very reason the EU has, as a result of the Blair House agreement, commited itself in its Schedule to apply tariffs on given cereals (and rice) which are not higher than necessary to defend its new lower threshold prices.

36. See Hathaway and Ingco (1995).

37. IATRC (1994), pp. 71.

38. See Yoshioka (1995).

39. EU cheese exports, not shown in a graph, will also have to be reduced significantly.

40. In particular, with a reduction of domestic cereals prices to the world market level, feed costs and, hence, prices of pork and poultry in the EU could drop so much that the EU might be able to export pork and poultry without export subsidies. The AoA constraints on the volume of subsidized pork and poultry exports would then no longer bind, and the volume of EU pork and poultry products could potentially increase very significantly.

41. However, the contents of these notifications are not made public by the WTO.

42. See Tangermann and Josling (1994).

43. As cereal prices in the EU will be further reduced in the 1995/96 crop year, the levies which would have resulted from the old regime would have fallen, too.

44. In practice there may though not be very much of an impact on actual trading flows as levies on pork and poultry imports into the EU tended to be prohibitive anyhow. In other words, what happens as the implementation period begins can be described as a further increase in the water already implicit in these levies.

45. Where countries wanted to be able to invoke this provision, they needed to indicate this in their Schedules. In most cases of products undergoing tariffication they have done so.

46. See Tangermann (1994), pp. 43-45.

47. This would be the case if market-access opportunities for the product concerned are greater than 30 per cent of domestic consumption during the three preceding years for which data are available and if domestic consumption in the year concerned has not increased.

48. The relevant text of the AoA, though, suggests that notification should occur "as far in advance as may be practicable and in any event within 10 days of the implementation" of the additional duty.

49. According to information received from Japan, TRQs for some starches were fully used at an early stage, and the price triggered SSP was then invoked for above-quota imports.

50. However, the Republic of Korea has notified its intention to auction licences under some TRQs.

51. Japan Agrinfo Newsletter, Vol. 12 No. 10, June 1995, p. 4.

52. Ibid., p. 5.

53. See Tangermann and Josling (1995).

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Table 2.1.1 Tariff bindings before the Uruguay Round in agriculture and industry, selected countries

Country groups	Percentage of tariff lines bound		Percentage of import value under bound rates	
	Agricultural products	Industrial products	Agricultural products	Industrial products
Developed economies	58	78	81	94
Developing economies	17	21	23	12
Transition economies	51	74	54	75

Source: GATT Secretariat, An Analysis of the Proposed Uruguay Round Agreement, with Particular Emphasis on Aspects of Interest to Developing Countries. Document MTN.TNC/W/122, MTN.GNG/W/30. Geneva 29 November 1993.

Note: 13 developed, 23 developing, 4 transition economies included in the GATT's Integrated Data Base; situation around 1988.

Table 2.1.2 Products with tariff bindings before the Uruguay Round, selected cases where applied tariffs were below bound levels

(percentages)

Country and product	Tariff applied before the implementation period	Base tariff bound in the Uruguay Round
European Union		
Cut flowers, from 1 June to 31 October	20	24
Cut flowers, from 1 November to 31 May	15	17
Coconuts	free	2
Avocados, from 1 December to 31 May	4	8
Guavas	4	6
Coffee, not roasted	4	5
Pepper, crushed or ground	4	12.5
Cigars	43	52
United States		
Cheese, made from sheep's milk	free	9
Bamboo shoots	free	17.5
Bananas, dried	free	3.5
Olive oil	5.0 cts/kg	8.4 cts/kg

Source: GATT, Schedules of Market Access Concessions, electronic version, Geneva (1994), European Union, Official Journal No. L 345, 31 December 1994, Internationales Bureau für Zolltarife, Bulletin International des Douanes, Vereinigte Staaten von Amerika, 21. Heft, Brussels, April 1994.

Table 2.2.1 **Estimated ad-valorem tariff equivalents versus tariffs declared in country schedules, selected products**

(percentages)

	European Union			Japan			United States		
	Estimate 1986-88	Bound Rate	Differ-ence	Estimate 1986-88	Bound Rate	Differ-ence	Estimate 1986-88	Bound Rate	Differ-ence
Wheat	103.0	155.6	52.6	651.0	239.6	-411.4	20.0	6.0	-14.0
Rice	153.0	360.5	207.5	500.0	n.a.	n.a.	1.0	5.0	4.0
Coarse grains	133.0	134.4	1.4	679.0	233.1	-445.9	4.0	8.0	4.0
Sugar	234.0	297.0	63.0	184.0	126.1	-57.9	131.0	197.0	66.0
Beef & veal	83.0	125.4	42.4	87.0	38.5	-48.5	3.0	31.0	28.0
Pork	40.0	51.7	11.7	99.0	87.3	-11.7	0.0	0.0	0.0
Poultry	51.0	44.5	-6.5	13.0	14.0	1.0	18.0	7.0	-11.0
Dairy	177.0	288.5	111.5	501.0	489.4	-11.6	132.0	144.0	12.0

Source: Hathaway, D.E., and M.D. Ingco, Agricultural Liberalization and the Uruguay Round. Paper presented at the World Bank Conference on "The Uruguay Round and the Developing Economies", Washington, January 26-27, 1995.

Table 2.2.2 Average tariff reductions

(percentages)

	European Union	Japan	United States
Actual schedule reductions			
(1a) Base period average tariff level	26.2	52.3	11.3
(1b) Final period average tariff level	17.7	40.2	7.9
(1c) Average of reduction rates	37.7	36.8	38.8
(1d) Difference (1a) - (1b) (in % of (1a)) *	32.4	23.1	30.1
(1e) Coefficient of variation of base tariffs	163.7	399.8	213.6
(1f) Coefficient of variation of final tariffs	169.6	426.4	259.0
Hypothetical Swiss Formula reductions			
(2a) Base period average tariff level	26.2	52.3	11.3
(2b) Final period average tariff level	10.5	12.3	4.0
(2c) Average of reduction rates	37.7	36.8	38.8
(2d) Difference (2a) - (2b) (in % of (2a)) *	59.9	76.5	64.6
(2e) Coefficient of variation of base tariffs	163.7	399.8	213.6
(2f) Coefficient of variation of final tariffs	80.4	82.3	77.9

Sources: GATT, Schedules of Market Access Concessions, electronic version, Geneva 1994. EUROSTAT; Tierische Erzeugung, var. issues. Senti, R., GATT als System der Welthandelsordnung, Zürich 1986 and own calculations.

* Change or variation of average tariff level as per cent of base period.

Table 2.2.3 Changes in tariff escalation, resulting from reduction commitment

Products	EU	Japan	USA
Coffee			
- raw			
- roasted, ground	+		
- extracts, prep.	+		
Tea			
- in bulk			
- for retail sale		-	
- extract, prep.	+	-	
Cocoa			
- beans			
- paste	+		
- butter	+	-	
- powder	-	+	
- chocolate	+	+	+
Spices			
- unground			
- processed	+	-	-
Vegetable Planting material			
- raw			
- plaits, etc.		-	-
- basketwork, etc.	+	-	-
Oilseeds, vegetable oils			
- oilseeds			
- vegetable oils		-	-

Products	EU	Japan	USA
Tobacco			
- unmanufactured			
- manufactured	-		-
Manioc, roots, tubers			
- fresh, dried			
- flour meals	0	+	+
- starches	0	+	+
Tropical fruits			
- fresh, dried			
- preserved	+	-	-
- prepared, juices	0	+	-
Tropical nuts			
- unshelled,crude			
- prepared	-	+	-
Hides and skins			
- raw materials			
- leather			
- articles (excl. footwear)	-	+	+
Total for products covered	+(9) -(4) 0(3)	+(7) -(8)	+(4) -(8)

Source: UNCTAD Secretariat, A Preliminary Analysis of the Results of the Uruguay Round and their Effects on the Trading Prospects of Developing Countries, Geneva 1994.

Table 2.3.1 European Union minimum access commitments where imports under the Europe Agreements may be taken into account

Product	Minimum access		Europe Agreement Preferences		
	Initial quota	Final quota	Quota	Ratio in percent	
	(in t) (1)	(in t) (2)	(in t) (3)	(3/(1))	(3/(2))
Cheese	18000	104000	7600	42.2	7.3
- Emmental	4000	25000	..	..	..
- Gruyère, Sbrinz	1000	7000	..	..	..
- cheddar	3000	15000	..	..	..
- for processing	4000	20000	..	..	..
- fresh (Mozarella type)	811	5000	..	..	..
- other	5189	32000	..	..	..
Eggs					
- for consumption, in shell	95000	180000	10250	10.8	5.7
- egg yolks/bird eggs, not in shell	7000	8000	-	-	-
- egg albumin	10000	20000	-	-	-
Skim-milk powder	41000	69000	7500	18.3	10.9
Butter	-	10000	2800	.	28.0
Poultry meat					
- turkey meat	-	1000	5500	.	550.0
- chicken cuts	-	4000			
- chicken carcass	-	6000	49700	.	497.0
Pork					
- carcasses, fresh, chilled or frozen	-	15000			
- cuts, fresh, chilled or frozen	-	5500	58670	.	286.2
- loins and hams, fresh, chilled or frozen	5677	34000	-	-	-
- tenderloins, fresh, chilled or frozen	833	5000	-	-	-
- sausages	-	3000	3070	.	102.3
- preserved meat	-	6100	3760	.	61.6

Sources: GATT, Schedules of Market Access Concessions, electronic version, Geneva 1994. Overberg, B., Die Auswirkungen der Europa-Abkommen mit den mitteleuropäischen Ländern auf den Agrarhandel, Göttingen, forthcoming and own calculations.

Table 2.3.2 Above-quota tariffs versus within-quota tariffs under minimum access, selected products

(percentages)

Country/ product	Above-quota tariffs		Within-quota tariffs		
	Initial	Final	Tariff rate	Ratio in percent	
	(a)	(b)	(c)	(c/(a)	(c/(b)
European Union					
Common wheat	88.5	56.4	-	-	-
Maize	134.6	86.1	45.7	34.0	53.1
Beef, boneless	101.2	64.7	20.0	19.8	30.9
Pork, carcasses	41.5	26.5	13.3	32.0	50.2
Chicken, carcass	25.2	16.1	8.1	32.1	50.3
Butter	235.2	150.5	33.2	14.1	22.1
SMP	149.4	119.5	47.8	32.0	40.0
Poultry eggs	75.0	48.0	24.0	32.0	50.0
Japan					
Common wheat	306.5	n.a.	-	-	-
Barley	179.0	n.a.	-	-	-
Butter	418.8	n.a.	35.0	8.4	n.a.
SMP	396.5	n.a.	35.0	8.8	n.a.
Ground-nuts	707.6	n.a.	10.0	1.4	n.a.
USA					

Source: GATT, Schedules of Market Access Concessions, electronic version, Geneva 1994. EUROSTAT; Tierische Erzeugung, var. issues and own calculations.

Note: USA - In-quota tariff rates are not specified in US Schedule.

Table 2.5.1 Commodity grouping for export-subsidy commitments

	Modalities	EU Schedule	US Schedule
(i)	Wheat and wheat flour	Wheat and wheat flour	Wheat
(ii)	Coarse grains	Coarse grains	Coarse grains
(iii)	Rice	Rice	Rice
(iv)	Oilseeds	Rapeseeds	
(v)	Vegetable oils	Olive oil	Vegetable oils
(vi)	Oilcakes		
(vii)	Sugar	Sugar, excl. ACP and Indian origin	
(viii)	Butter and butter oil	Butter and butter oil	Butter and butter oil
(ix)	Skim milk powder	Skim milk powder	Skim milk powder
(x)	Cheese	Cheese	Cheese
(xi)	Other milk products	Other milk products	Other milk products
(xii)	Bovine meat	Beef meat	Bovine meat
(xiii)	Pig meat	Pig meat	Pig meat
(xiv)	Poultry meat	Poultry meat	Poultry meat
(xv)	Sheepmeat		
(xvi)	Live animals		Live dairy cattle
(xvii)	Eggs	Eggs	Eggs
(xviii)	Wine	Wine	
(xix)	Fruit	Fruit and vegetables, fresh	
(xx)	Vegetables	Fruit and vegetables, processed	
(xxi)	Tobacco	Raw tobacco	
(xxii)	Cotton		
		Alcohol	
		Incorporated products	

Source: GATT Secretariat, An Analysis of the Proposed Uruguay Round Agreement, with Particular Emphasis on Aspects of Interest to Developing Countries. Document MTN.TNC/W/122, MTN.GNG/W/30. Geneva 29 November 1993. GATT, Schedules of Market Access Concessions, electronic version, Geneva 1994.

Table 3.1.1 Final tariff levels, ad-valorem equivalents, selected products and average

(Percentages)

Product	EU	Japan	USA
Common wheat	56.5	259.3	1.8
Barley	90.0	151.7	0.6
Maize, not for sowing	86.1	3.4	2.0
Rice, not for sowing	13.0		8.3
Soya beans	0.0	0.0	0.0
Coffee, not roasted	0.0	0.0	0.0
Coffee, roasted	7.5	12.0	0.0
Tea	0.0	17.0	6.4
Cacao beans	0.0	0.0	0.0
Bananas, green	145.6	27.5	0.0
Sugar, cane, for refining	41.0	115.4	58.5
Tobacco	18.4	17.8	7.9
Beef, carcasses	87.8	50.0	26.4
Pork, carcasses	28.6	136.3	0.0
Chicken, not in pieces	16.1	11.9	5.2
Butter	66.5	307.2	46.6
Skim-milk powder	119.5	337.0	74.1
Unweighted average of all agricultural products	17.7	40.2	7.9

Sources: GATT, Schedules of Market Access Concessions, electronic version, Geneva 1994, EUROSTAT; Tierische Erzeugung, var. issues, and own calculations.

Table 3.1.2 "Policy water" in the tariffs, selected products

(Percentages)

Country/product	Tariff "required" in 1993	Base tariff 1995	Final tariff 2000
European Union			
Common wheat	65.6	88.5	56.4
Barley	116.2	140.3	90.0
Maize	115.6	134.6	86.1
Raw sugar	85.3	87.0	69.5
Beef	172.6	158.9	101.7
Butter	241.9	235.2	150.5
SMP	150.7	149.4	119.5
USA			
Beef	57.9	31.1	26.4
SMP	71.6	87.2	74.1
Butter	47.0	54.9	46.6
Sugar	47.3	68.8	58.5

Sources: European Union, Final Offer - Supporting Tables (AGST/EEC), 1993; United States of America, Final Offer - Supporting Tables (AGST/USA), 1993; OECD, Tables of Producer Subsidy Equivalents and Consumer Subsidy Equivalents 1979-1993 on Diskettes, Paris 1994; GATT, Schedules of Market Access Concessions, electronic version, Geneva 1994; EUROSTAT; Tierische Erzeugung, var. issues and own calculations.

Table 4.1.1 Current levies versus bound tariffs, selected poultry and pork products

(ECUs per ton)

	Current levy (April-June 1995)	Base tariff 1995	Final tariff 2000
Poultry			
83% chickens, fresh or chilled	290.8	410.0	262.0
Chicken cuts, boneless, fresh, chilled or frozen	946.1	1 600.0	1 024.0
82% geese, fresh, chilled or frozen	504.6	705.0	451.0
Pork			
Pork, carcasses, fresh, chilled or frozen	531.1	838.0	536.0
Hams and cuts thereof, fresh or chilled	770.0	1 215.0	778.0
Loins and cuts thereof	860.3	1 358.0	869.0

Source: GATT, Schedules of Market Access Concessions, electronic version, Geneva 1994; European Commission, Agricultural Markets - Prices, Brussels, var. issues.

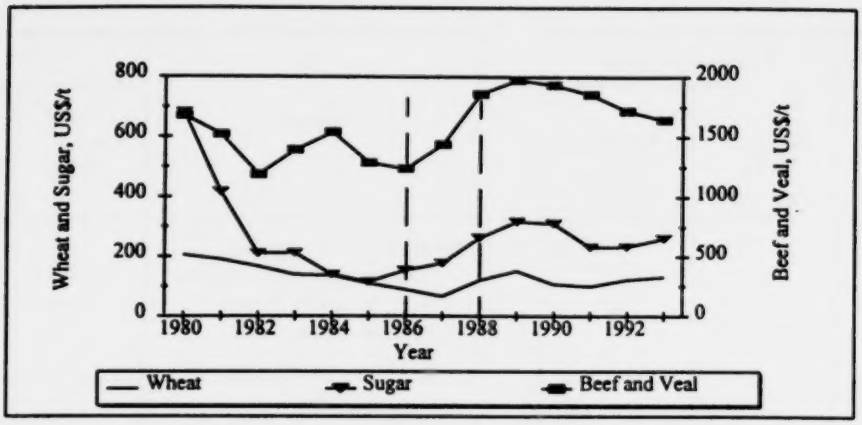
Table 4.2.1 Trigger prices for safeguard provision versus external reference prices for tarrification, selected products

Product	European Union	
	Trigger price ECU/t	Ext. ref. price ECU/t
Beef carcass	2310	1526
Skim-milk powder	706	685
Butter	2483	943
Bananas, fresh	553	267
Lemons	442	303
Common wheat	148	93
Maize	114	95
Rice, milled	573	235
Raw sugar	418	176
White sugar	531	195

Product	USA	
	Trigger price US$/t	Ext. ref. price US$/t
Meat of bovine animals		1510
- Beef carcass, fresh, chilled	1710	
- Beef, boneless, frozen	1810	
- Beef, boneless, fresh, chilled	1970	
Non-fat dry milk	1020	858
Butter	2780	1313
Cheddar cheese	2180	1368
Edam and Gouda cheese	3200	1470
Peanuts, in shell	340	274
Cotton waste	8150	1325
Sugar, refined	500	267

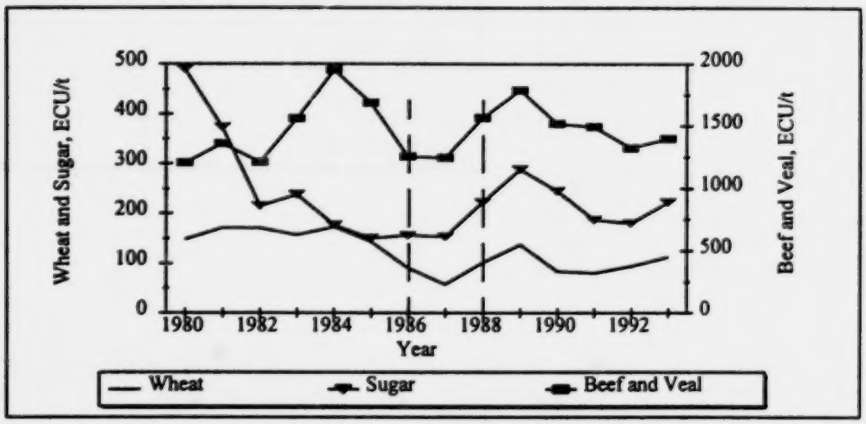
Sources: European Union, Final Offer - Supporting Tables (AGST/EEC), 1993; United States of America, Final Offer - Supporting Tables (AGST/USA), 1993.

Graph 2.1.1 World Market Prices in US$, Selected Commodities



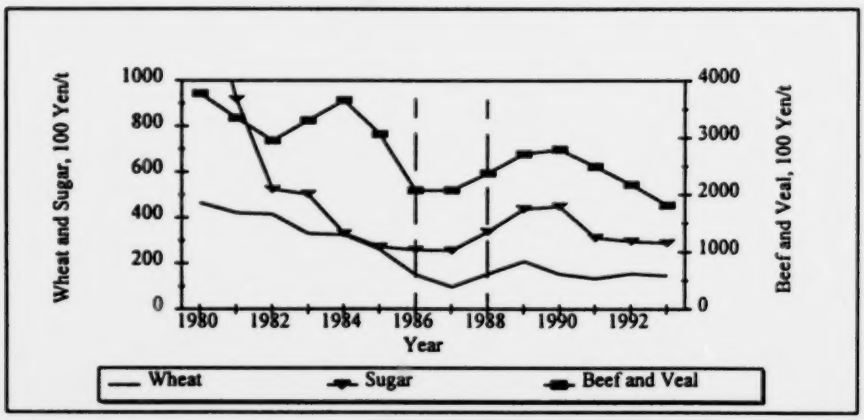
Sources: IWC (var. issues), Agrarwirtschaft (var. issues), OECD (1994), Deutsche Bundesbank (var. issues) and own calculations

Graph 2.1.2 World Market Prices in ECU, Selected Commodities



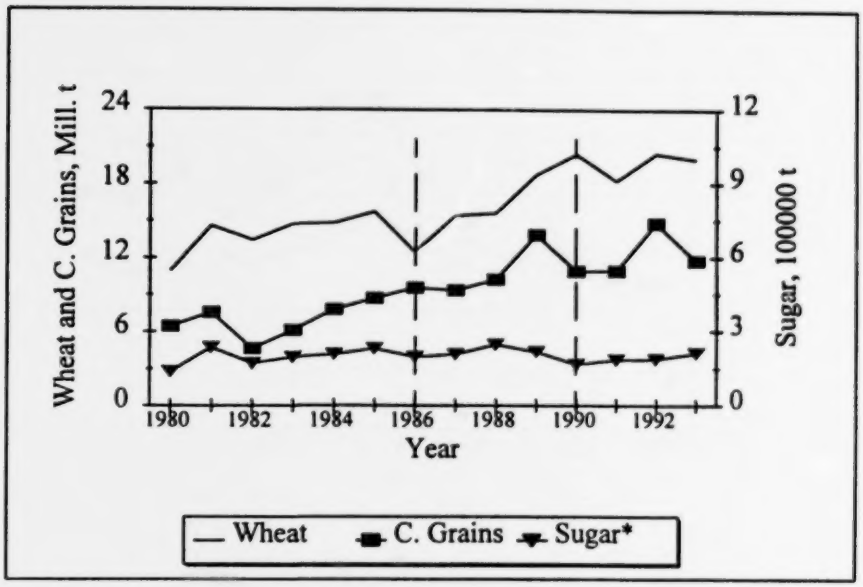
Sources: IWC (var. issues), Agrarwirtschaft (var. issues), OECD (1994), Deutsche Bundesbank (var. issues) and own calculations

Graph 2.1.3 World Market Prices in Yen, Selected Commodities



Sources: IWC (var. issues), Agrarwirtschaft (var. issues), OECD (1994), Deutsche Bundesbank (var. issues) and own calculations

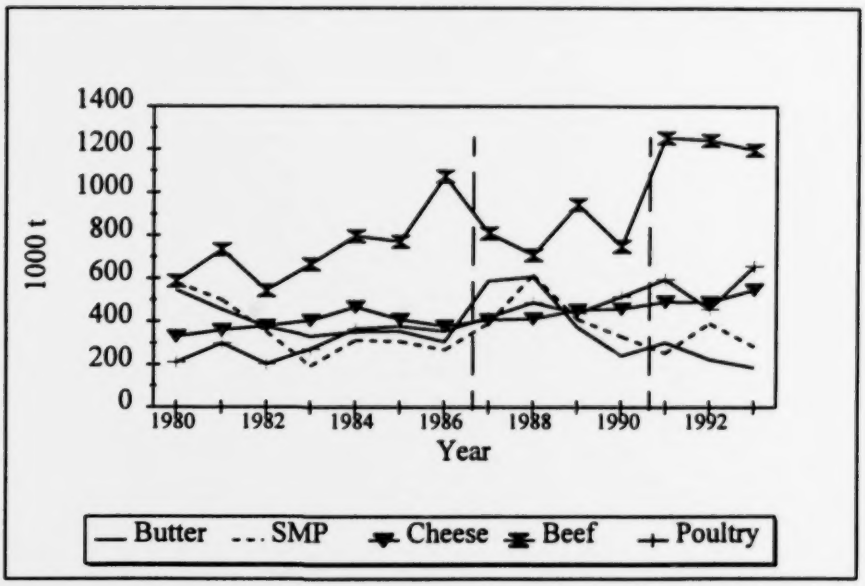
Graph 2.1.4 Quantities of Subsidized Exports, EU, Selected Products



* excluding sugar of ACP and Indian origin

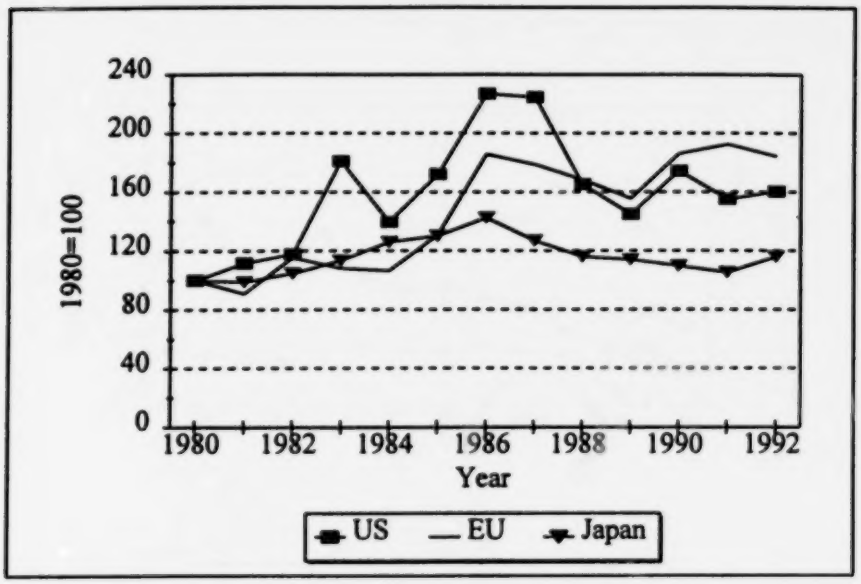
Sources: EUROSTAT (1991, 1994) and own calculations

Graph 2.1.5 Quantities of Subsidized Exports, EU, Livestock Products



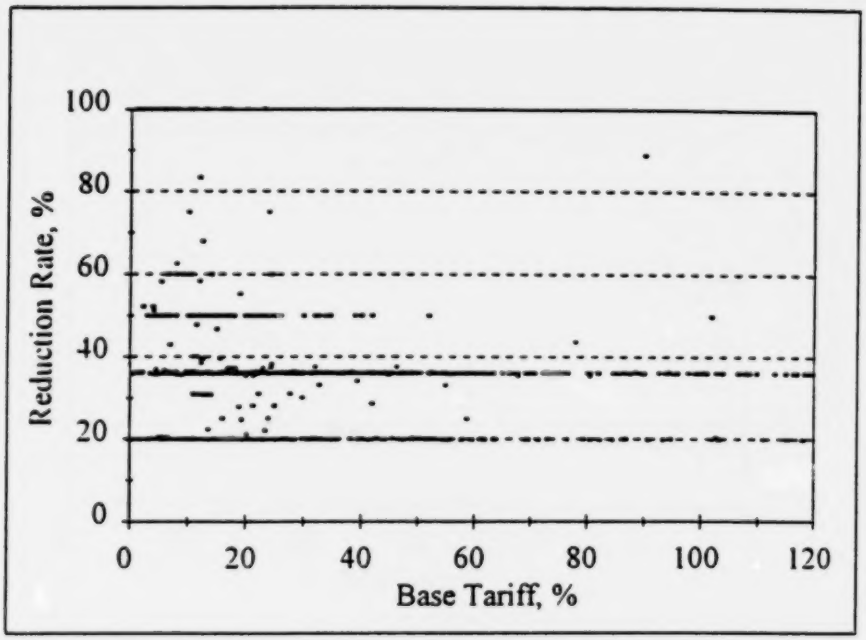
Sources: EUROSTAT (1991, 1994)

Graph 2.1.6 Index of Gross Total PSE, Nominal, National Currencies



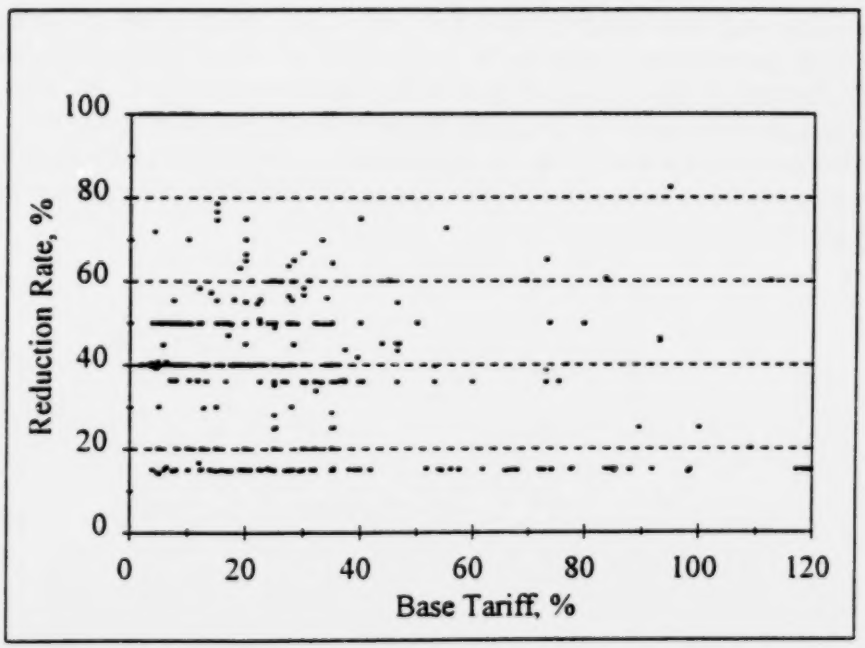
Sources: OECD (1994) and own calculations

Graph 2.2.1 Base Tariffs and Reduction Rates, EU



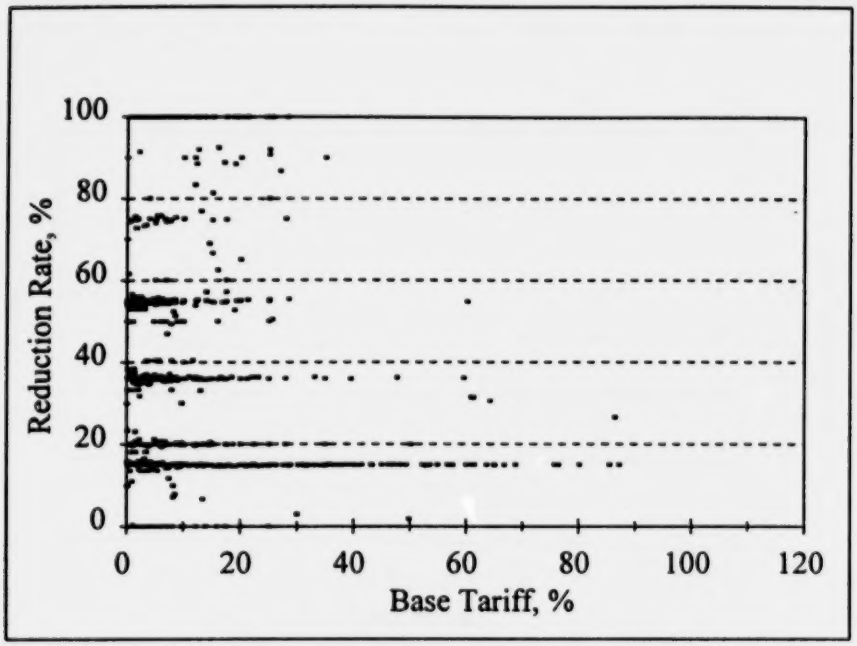
Sources: GATT (1994), EUROSTAT (1994) and own calculations

Graph 2.2.2 Base Tariffs and Reduction Rates, Japan



Sources: GATT (1994), EUROSTAT (1994) and own calculations

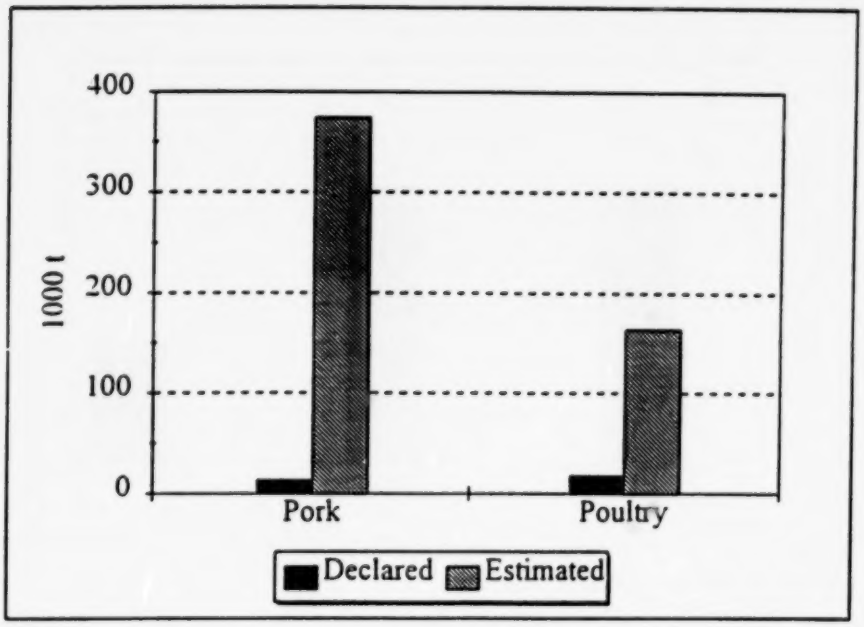
Graph 2.2.3 Base Tariffs and Reduction Rates, USA



Sources: GATT (1994), EUROSTAT (1994) and own calculations

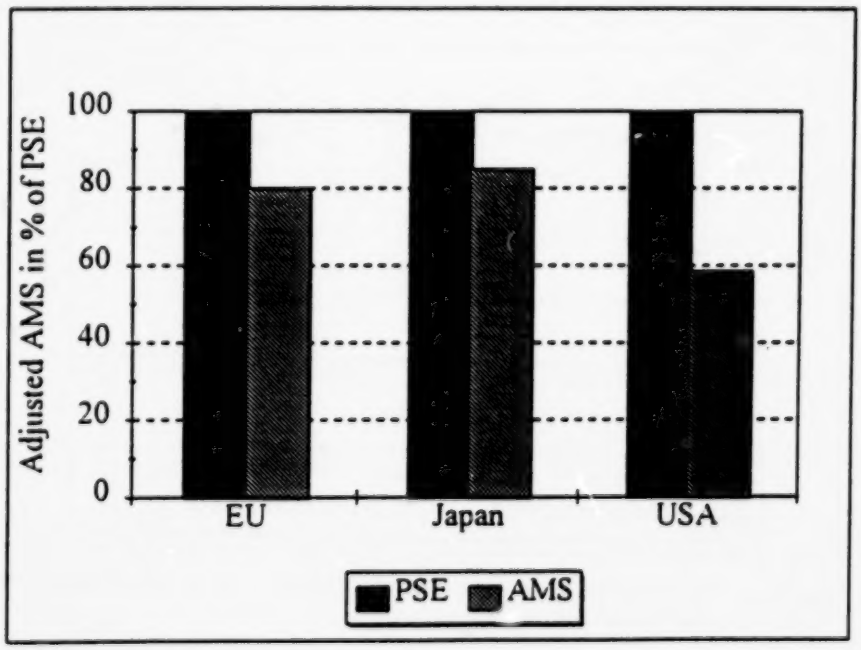
Graphs 2.2.1 to 2.2.3 show, for each of the countries concerned, tariffs for all tariff lines together with their reduction rates. Each dot in these graphs represents one tariff line. On the horizontal axis, base tariffs, expressed in *ad valorem* equivalents, are measured. On the vertical axis, reduction rates of the respective tariffs are given. Thus, dots in the left hand upper corner of the graphs represent tariffs which are low initially and are reduced by a high rate during the implementation period (and *vice versa*). Base tariffs with *ad valorem* rates above 120 per cent are not shown (in order to keep the graphs legible).

Graph 2.3.1 EU Minimum Access for Pork and Poultry, Schedule Commitments versus Estimated Quantities, Initial Quota



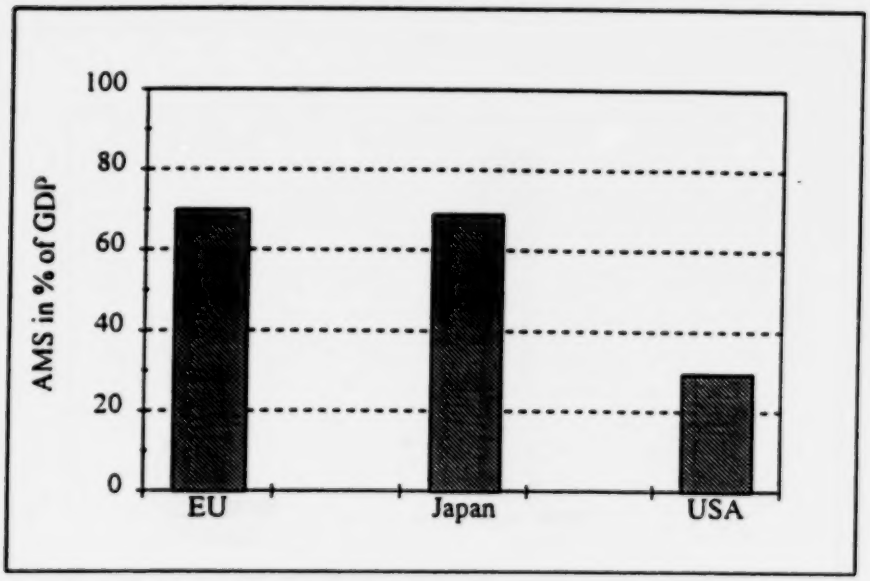
Sources: GATT (1994), European Commission (1988, 1989, 1990) and own calculations

Graph 2.4.1 Gross Total PSE versus Adjusted AMS in 1986-88



Sources: OECD (1994), GATT (1994) and own calculations

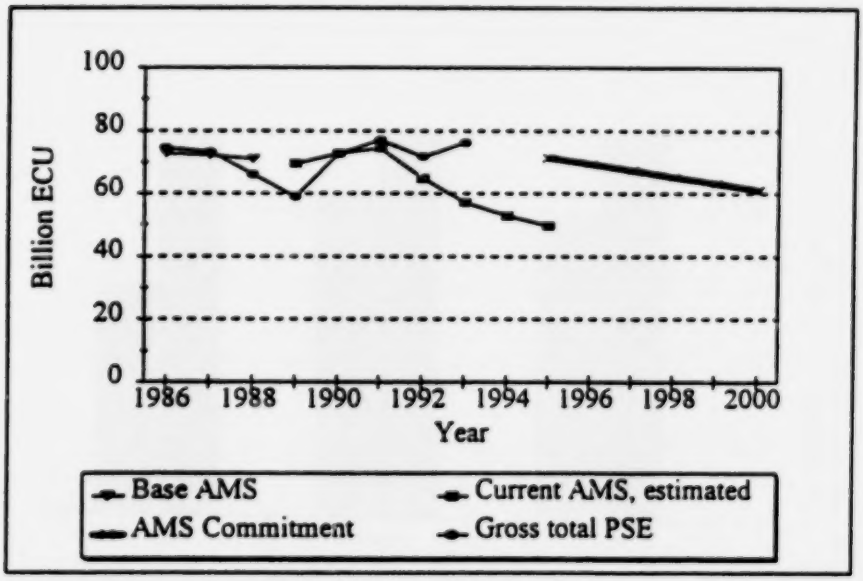
Graph 3.3.1 Base AMS (1986) Relative to GDP in Agriculture



GDP is gross value added at factor costs

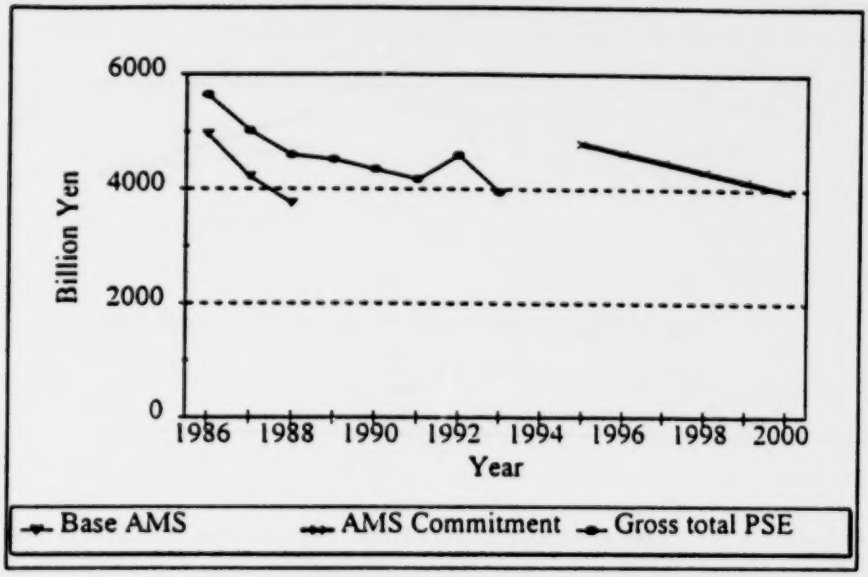
Sources: GATT (1994), OECD (1995) and own calculations

Graph 3.3.2 AMS in the European Union



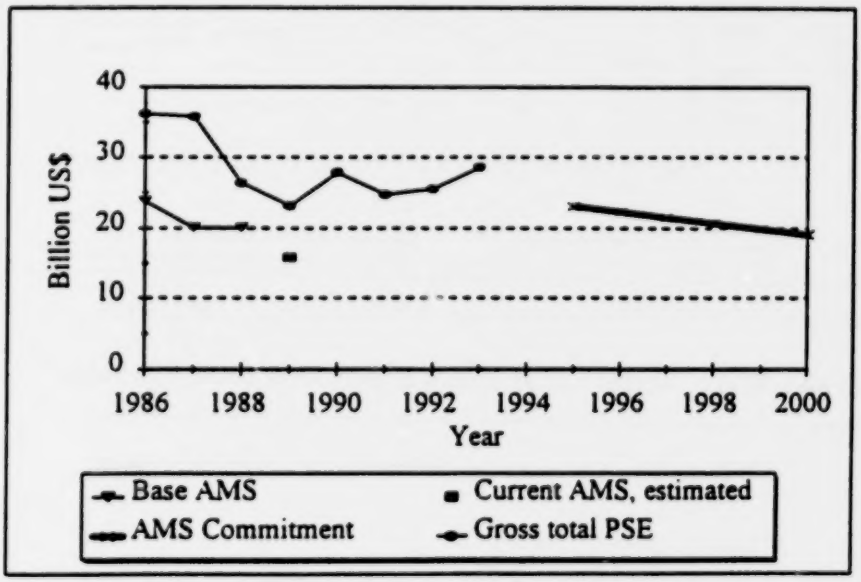
Sources: GATT (1994), European Union (1993), OECD (1994), Agrar Europe (1995), EUROSTAT (var. issues) and own calculations

Graph 3.3.3 AMS in Japan



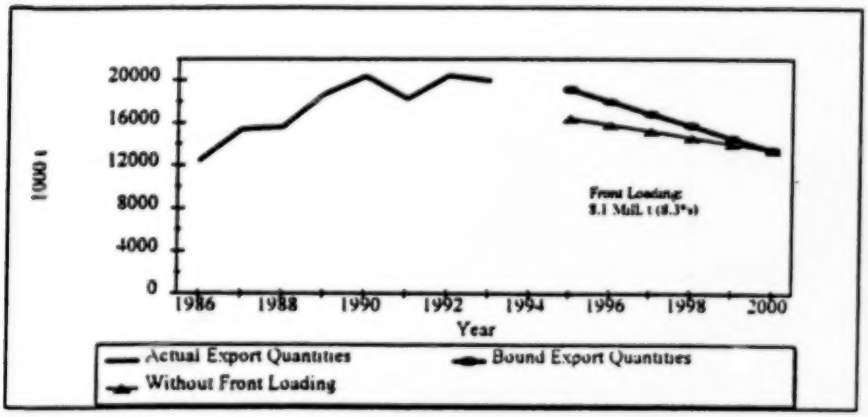
Sources: GATT (1994), Japan (1993), OECD (1994) and own calculations

Graph 3.3.4 AMS in the USA



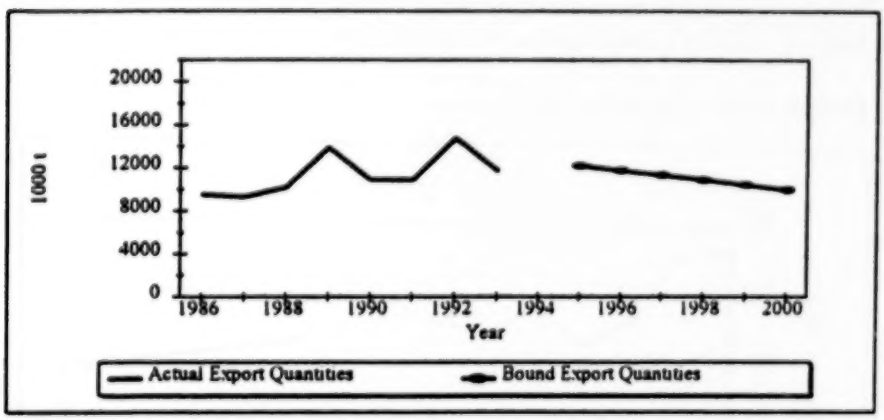
Sources: GATT (1994), United States of America (1993), OECD (1994) and own calculations

Graph 3.4.1 Actual versus Bound Export Quantities, EU, Common Wheat



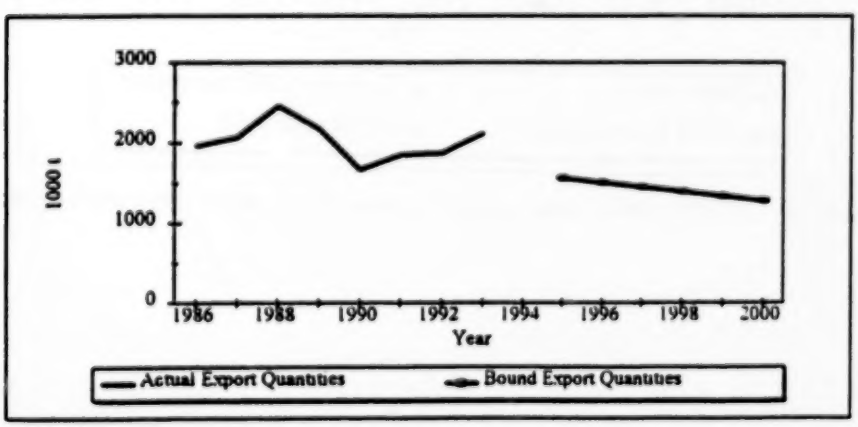
Sources: GATT (1994), European Union (1993), EUROSTAT (1991, 1994) and own calculations

Graph 3.4.2 Actual versus Bound Export Quantities, EU, Coarse Grains



Sources: GATT (1994), European Union (1993), EUROSTAT (1991, 1994)

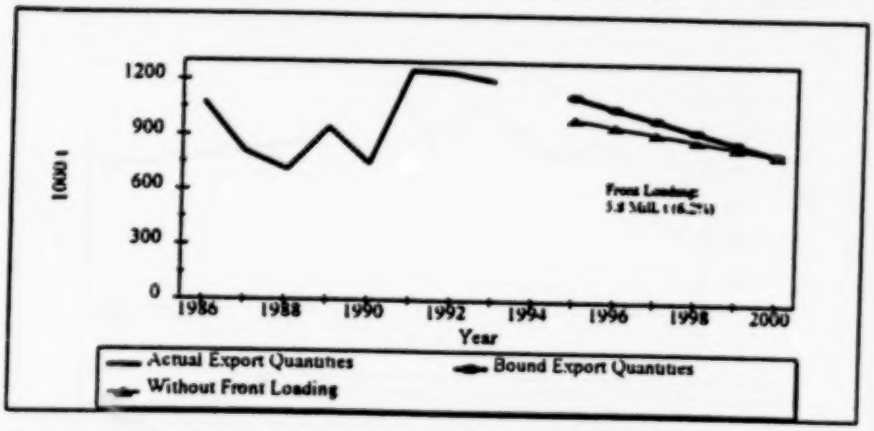
Graph 3.4.3 Actual versus Bound Export Quantities, EU, Sugar*



* excluding sugar of ACP and Indian origin

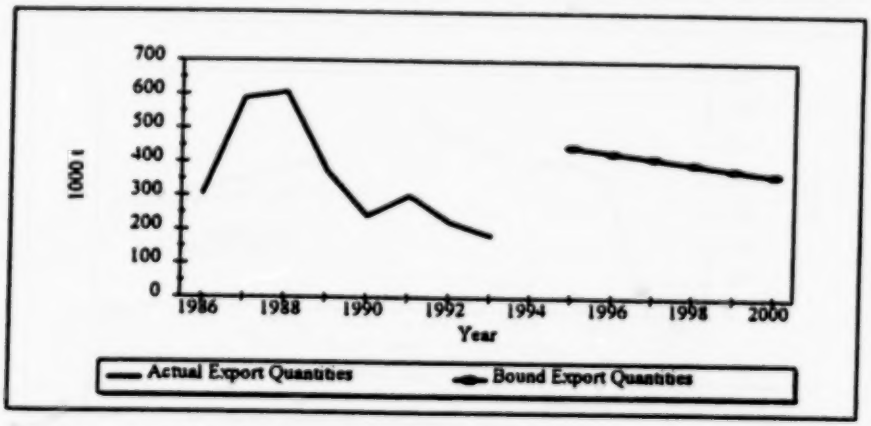
Sources: GATT (1994), European Union (1993), European Commission (var. issues) and own calculations

Graph 3.4.4 Actual versus Bound Export Quantities, EU, Beef



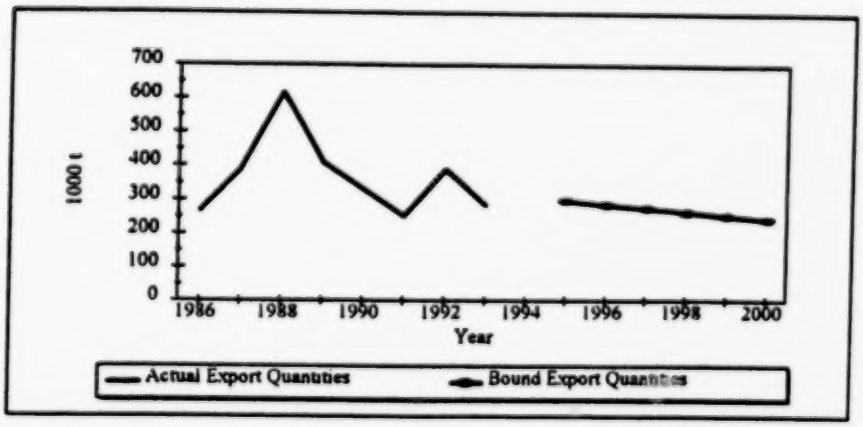
Sources: GATT (1994), European Union (1993), EUROSTAT (1991, 1994) and own calculations

Graph 3.4.5 Actual versus Bound Export Quantities, EU, Butter



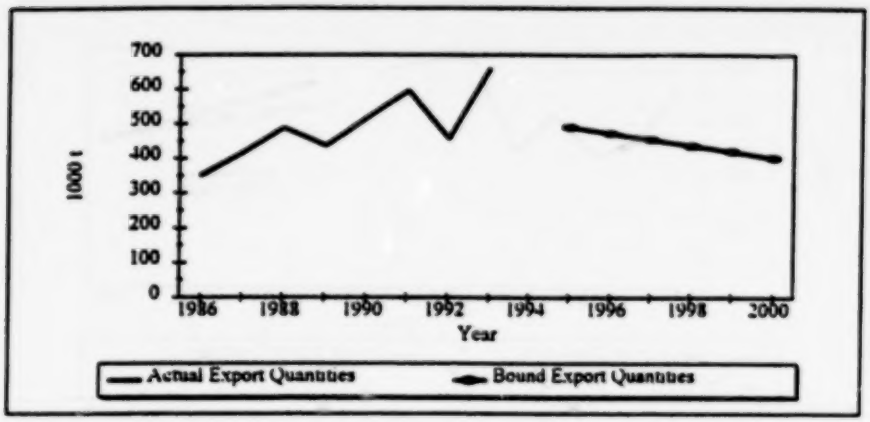
Sources: GATT (1994), European Union (1993), EUROSTAT (1991, 1994)

Graph 3.4.6 Actual versus Bound Export Quantities, EU, Skimmed Milk Powder



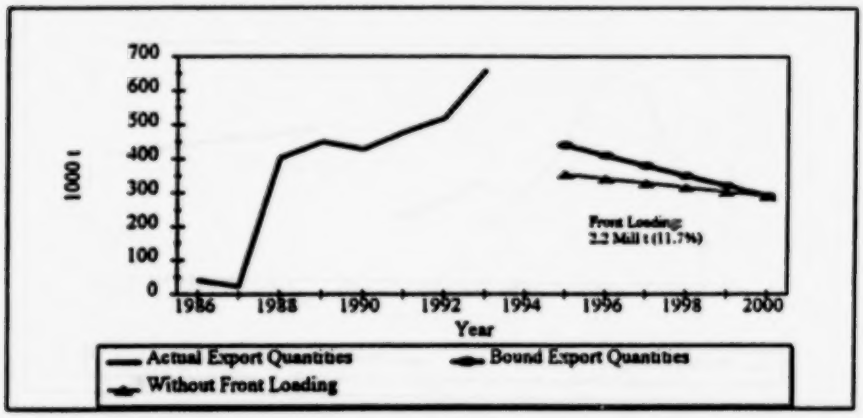
Sources: GATT (1994), European Union (1993), EUROSTAT (1991, 1994)

Graph 3.4.7 Actual versus Bound Export Quantities, EU, Pigmeat



Sources: GATT (1994), European Union (1993), EUROSTAT (1991, 1994)

Graph 3.4.8 Actual versus Bound Export Quantities, EU, Poultry



Sources: GATT (1994), European Union (1993), EUROSTAT (1991, 1994) and own calculations